

## Rational Numbers Class 8 MCQs Questions

Question 1.

Which of the following statements is false ?

- (a) Natural numbers are closed under addition
- (b) Whole numbers are closed under addition
- (c) Integers are closed under addition
- (d) Rational numbers are not closed under addition.

Question 2.

Which of the following statements is false ?

- (a) Natural numbers are closed under subtraction
- (b) Whole numbers are not closed under subtraction
- (c) Integers are closed under subtraction
- (d) Rational numbers are closed under subtraction.

Question 3.

Which of the following statements is true ?

- (a) Natural numbers are closed under multiplication
- (b) Whole numbers are not closed under multiplication
- (c) Integers are not closed under multiplication
- (d) Rational numbers are not closed under multiplication.

Question 4.

Which of the following statements is true ?

- (a) Natural numbers are closed under division
- (b) Whole numbers are not closed under division
- (c) Integers are closed under division
- (d) Rational numbers are closed under division.

Question 5.

Which of the following statements is false ?

- (a) Natural numbers are commutative for addition
- (b) Whole numbers are commutative for addition
- (c) Integers are not commutative for addition
- (d) Rational numbers are commutative for addition.

Question 6.

Which of the following statements is true ?

- (a) Natural numbers are commutative for subtraction
- (b) Whole numbers are commutative for subtraction
- (c) Integers are commutative for subtraction
- (d) Rational numbers are not commutative for subtraction.

Question 7.

Which of the following statements is false ?

- (a) Natural numbers are commutative for multiplication
- (b) Whole numbers are commutative for multiplication
- (c) Integers are not commutative for multiplication
- (d) Rational numbers are commutative for multiplication.

Question 8.

Which of the following statements is true ?

- (a) Natural numbers are commutative for division
- (b) Whole numbers are not commutative for division
- (c) Integers are commutative for division
- (d) Rational numbers are commutative for division.

Question 9.

Which of the following statements is true ?

- (a) Natural numbers are associative for addition
- (b) Whole numbers are not associative for addition
- (c) Integers are not associative for addition
- (d) Rational numbers are not associative for addition.

Question 10.

Which of the following statements is true ?

- (a) Natural numbers are associative for subtraction
- (b) Whole numbers are not associative for subtraction
- (c) Integers are associative for subtraction
- (d) Rational numbers are associative for subtraction.

Question 11.

Which of the following statements is true ?

- (a) Natural numbers are not associative for multiplication
- (b) Whole numbers are not associative for multiplication
- (c) Integers are associative for multiplication
- (d) Rational numbers are not associative for multiplication.

Question 12.

Which of the following statements is true ?

- (a) Natural numbers are associative for division
- (b) Whole numbers are associative for division
- (c) Integers are associative for division
- (d) Rational numbers are not associative for division.

Question 13.

0 is not

- (a) a natural number
- (b) a whole number
- (c) an integer
- (d) a rational number.

Question 14

$\frac{1}{2}$  is 2

- (a) a natural number
- (b) a whole number
- (c) an integer
- (d) a rational number.

Question 15

$a + b = b + a$  is called

- (a) commutative law of addition
- (b) associative law of addition
- (c) distributive law of addition
- (d) none of these.

Question 16

$a \times b = b \times a$  is called

- (a) commutative law for addition
- (b) commutative law for multiplication
- (c) associative law for addition
- (d) associative law for multiplication.

Question 17

$(a + b) + c = a + (b + c)$  is called

- (a) commutative law for multiplication
- (b) commutative law for addition
- (c) associative law for addition
- (d) associative law for multiplication.

Question 18

$a \times (b \times c) = (a \times b) \times c$  is called

- (a) associative law for addition
- (b) associative law for multiplication
- (c) commutative law for addition
- (d) commutative law for multiplication.

Question 19

$a(b + c) = ab + ac$  is called

- (a) commutative law
- (b) associative law
- (c) distributive law
- (d) none of these.

Question 20

The additive identity for rational numbers is

- (a) 1
- (b) -1
- (c) 0
- (d) none of these.

Question 21

The multiplicative identity for rational numbers is

- (a) -1
- (b) 1
- (c) 0
- (d) none of these.

Question 22

The additive inverse of  $\frac{2}{3}$  is

- (a)  $\frac{2}{3}$
- (b)  $\frac{3}{2}$
- (c)  $-\frac{3}{2}$
- (d) 1

Question 23

The additive inverse of  $-\frac{3}{4}$  is

- (a)  $-\frac{3}{4}$
- (b) 1
- (c) 0
- (d)  $\frac{3}{4}$

Question 24.

The multiplicative inverse of  $\frac{1}{2}$  is

- (a) 1
- (b) -1
- (c) 2
- (d) 0

Question 25.

The multiplicative inverse of  $-\frac{2}{5}$  is

- (a)  $-\frac{2}{5}$
- (b)  $-\frac{5}{2}$

- (c)  $\frac{5}{2}$   
(d) 1

Question 26

The multiplicative inverse of 1 is

- (a) 0  
(b) -1  
(c) 1  
(d) none of these.

Question 27

The multiplicative inverse of -1 is

- (a) 0  
(b) -1  
(c) 1  
(d) none of these.

Question 28

How many rational numbers are there between any two given rational numbers?

- (a) Only one  
(b) Only two  
(c) Countless  
(d) Nothing can be said.

Question 29

The negative of 2 is

- (a) 2  
(b)  $\frac{1}{2}$   
(c) -2  
(d)  $-\frac{1}{2}$

Question 30

The negative of -2 is

- (a) -2  
(b) 2  
(c)  $-\frac{1}{2}$   
(d)  $\frac{1}{2}$

Question 31.

If a and b are two rational numbers, then

- (a)  $\frac{a+b}{2} < a$

- (b)  $\frac{a+b}{2} < b$   
(c)  $\frac{a+b}{2} = a$   
(d)  $\frac{a+b}{2} > b$

Question 32

The rational number that does not have a reciprocal is

- (a) 0  
(b) 1  
(c) -1  
(d)  $\frac{1}{2}$

Question 33

The rational number which is equal to its negative is

- (a) 0  
(b) -1  
(c) 1  
(d)  $\frac{1}{2}$

Question 34

The reciprocal of  $\frac{1}{x}$  ( $x \neq 0$ ) is

- (a)  $x$   
(b)  $\frac{1}{x}$   
(c) 1  
(d) 0

Question 35

The reciprocal of a positive rational number is

- (a) a positive rational number  
(b) a negative rational number  
(c) 0  
(d) 1.

Question 36.

The reciprocal of a negative rational number is

- (a) a positive rational number  
(b) a negative rational number  
(c) 0  
(d) -1

## One Variable Class 8 MCQs Questions

Question 1.

The standard form of a linear equation in one variable  $x$  is

- (a)  $ax + b = 0$
- (b)  $ax^2 + bx + c = 0$
- (c)  $ax^3 + bx^2 + cx + d = 0$
- (d)  $ax^4 + bx^3 + cx^2 + dx + e = 0$

Question 2.

Of the following, the linear equation in one variable  $x$ , is

- (a)  $\frac{4}{x} = \frac{x}{4}$
- (b)  $\frac{1}{x} + \frac{1}{x-1} = 1$
- (c)  $\frac{x}{2} + \frac{x}{3} + \frac{1}{4}$
- (d)  $x^2 + 2x + 3 = 0$ .

Question 3

The degree of the equation  $x^2 - 2x + 1 = x^2 - 3$  is

- (a) 1
- (b) 2
- (c) 0
- (d) 3

Question 4

The statement 'on adding 10 in a number, the number becomes 20' in the form of an equation is

- (a)  $x - 10 = 20$
- (b)  $x + 10 = 20$
- (c)  $10x = 20$
- (d)  $\frac{x}{10} = 20$

Question 5

If 9 is added to a number, it becomes 25. This statement in the form of an equation is

- (a)  $x + 9 = 25$
- (b)  $x - 9 = 25$
- (c)  $9x = 25$
- (d)  $\frac{x}{9} = 25$

Question 6

If 15 is subtracted from a number, it becomes -5. This statement in the form of an equation is

- (a)  $x + 15 = -5$
- (b)  $x - 15 = 5$
- (c)  $x + 15 = 5$
- (d)  $x - 15 = -5$ .

Question 7

Seven times a number is 42. This statement in the form of an equation is

- (a)  $x + 7 = 42$
- (b)  $7x = 42$
- (c)  $\frac{x}{7} = 42$
- (d)  $x - 7 = 42$

Question 8

A number when divided by 5 gives 6. This statement in the form of an equation is

- (a)  $x - 5 = 6$
- (b)  $x + 5 = 6$
- (c)  $\frac{x}{5} = 6$
- (d)  $5x = 6$

Question 9

A number when subtracted from 40 results into 15. This statement in the form of an equation is

- (a)  $40 - x = 15$
- (b)  $x - 40 = 15$
- (c)  $40 + x = 15$
- (d)  $40x = 15$

Question 10

If 6 is added to 3 times of a number, it becomes 15. This statement in the form of an equation is

- (a)  $3x + 6 = 15$
- (b)  $3x - 6 = 15$
- (c)  $3x + 15 = 6$
- (d)  $\frac{3x}{6} = 15$

Question 11

On subtracting 30 from two times a number, we get 56. This statement in the form of an equation is

- (a)  $2x - 30 = 56$
- (b)  $2x + 30 = 56$
- (c)  $30 - 2x = 56$
- (d)  $\frac{30}{2x} = 56$

Question 12

The root of the equation  $z + 4 = -8$  is

- (a) 3
- (b) -32
- (c) 12
- (d) 4



Question 13

The root of the equation  $3x = \frac{20}{7} - x$  is

- (a) 10
- (b)  $\frac{20}{21}$
- (c)  $-\frac{5}{7}$
- (d)  $\frac{5}{7}$

Question 14

The root of the equation  $2x + 3 = 2(x - 4)$  is

- (a) 2
- (b) 4
- (c) 0
- (d) does not exist.

Question 15

The solution of the equation  $\frac{5}{x} = 2$  is

- (a) 10
- (b)  $\frac{2}{5}$
- (c)  $\frac{5}{2}$
- (d)  $\frac{1}{10}$

Question 16

The largest number of the three consecutive numbers is  $x + 1$ . Then, the smallest number is

- (a)  $x + 2$
- (b)  $x + 1$
- (c)  $x$
- (d)  $x - 1$ .

Question 17

If  $x$  is an even number then the consecutive even number is

- (a)  $x + 1$
- (b)  $x + 2$
- (c)  $2x$
- (d)  $x - 1$

Question 18

$x$  is an odd number. The largest odd number preceding  $x$  is

- (a)  $x - 1$
- (b)  $x - 2$
- (c)  $x - 3$
- (d)  $x - 4$ .

Question 19

The difference of two numbers is 21. The larger number is x. The smaller number is

- (a)  $21 + x$
- (b)  $21 - x$
- (c)  $x - 21$
- (d)  $-x - 21$ .

Question 20

In a two digit number, the unit's digit is x and the ten's digit is y. Then, the number is

- (a)  $10y + x$
- (b)  $10x + y$
- (c)  $10y - x$
- (d)  $10x - y$ .

Question 21

When 9 is added to two times a number, we get 67. The number is

- (a) 25
- (b) 27
- (c) 29
- (d) 31.

Question 22

The root of the equation  $\frac{-5}{4x} = 15$  is

- (a)  $\frac{1}{12}$
- (b)  $\frac{1}{12}$
- (c)  $\frac{1}{20}$
- (d)  $\frac{1}{20}$

Question 23.

The value of x in  $\frac{3}{4}x = 7 - x$  is

- (a) 4
- (b) 3
- (c)  $\frac{7}{3}$
- (d) 7.

Question 24

$\frac{3}{4}$  part of a number is 5 more than its  $\frac{2}{3}$  part. This statement in the form of an equation is

- (a)  $\frac{2}{3}x - \frac{3}{4}x = 5$
- (5)  $\frac{2}{3}x - 5 = \frac{3}{4}x$

(c)  $\frac{3}{4}x = \frac{2}{3}x + 5$   
(d)  $\frac{3}{4}x - 5 = -\frac{2}{3}x$

Question 25

The value of  $x$  in  $-\frac{2}{3} = 2x$  is 3

- (a)  $\frac{1}{3}$
- (b)  $-\frac{1}{3}$
- (c) 3
- (d) -3

Question 26

The root of the equation  $5x - 8 = 7$  is

- (a) 1
- (b) 2
- (c) 3
- (d) -3.

Question 27

The root of the equation  $x + 3 = 5$  is

- (a) 1
- (b) 2
- (c) -1
- (d) -2.

Question 28

The root of the equation  $x - 8 = 2$  is

- (a) 2
- (b) 8
- (c) 6
- (d) 10.

Question 29

The root of the equation  $3x + 8 = 14$  is

- (a) 1
- (b) 2
- (c) -1
- (d)  $\frac{1}{2}$

Question 30

The root of the equation  $2y = 5(3 + y)$  is

- (a) 5
- (b)  $\frac{1}{5}$
- (c) -5
- (d)  $-\frac{1}{5}$

Question 31

The root of the equation  $\frac{y}{3} - 7 = 11$  is

- (a) 54
- (b) -54
- (c) 18
- (d) -18

Question 32

The root of the equation  $14 - x = 8$  is

- (a) 2
- (b) 4
- (c) 6
- (d) 8.

Question 33

The root of the equation  $\frac{5x}{3} = 30$  is

- (a) 9
- (b) 12
- (c) 15
- (d) 18

Question 34

The root of the equation  $3y + 4 = 5y - 4$  is

- (a) 1
- (b) 2
- (c) 3
- (d) 4

Question 35

The root of the equation  $\frac{7x}{3} = 3$  is

- (a)  $\frac{5x}{3}$
- (b)  $\frac{7}{3}$
- (c) 3
- (d) 7

Question 36

The root of the equation  $3x + 4 = 13$  is

- (a) 1
- (b) 2

- (c) 3
- (d) 4.

Question 37

The root of the equation  $9z - 15 = 9 - 3z$  is

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 38

The root of the equation  $\frac{4x}{7} - 12 = 0$  is

- (a) 7
- (b) 14
- (c) 21
- (d) -21

Question 39

The root of the equation  $3x = \frac{20}{7} - x$  is

- (a)  $\frac{7}{5}$
- (b)  $\frac{5}{7}$
- (c)  $-\frac{7}{5}$
- (d)  $-\frac{5}{7}$

Question 40

The root of the equation  $2y = 5(7 - y)$  is

- (a) 5
- (b) -5
- (c) 3
- (d) -3

Question 41

The root of the equation

$$(2x - 1) + (x - 1) = x + 2$$

- (a) 1
- (b) 2
- (c) -1
- (d) -2.

Question 42

The root of the equation  
 $13x - 14 = 9x + 10$  is

- (a) 1
- (b) 2
- (c) 3
- (d) 6.

Question 43

The root of the equation  
 $11x - 5 - x + 6 = 2x + 17$  is

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 44

The root of the equation  $\frac{2}{3}y = \frac{5}{12}$  is

- (a)  $\frac{8}{5}$
- (b)  $\frac{5}{8}$
- (c) 5
- (d) 8

Question 45

The root of the equation  $7(x - 1) = 21$  is

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 46

The root of the equation  $\frac{3}{2}x = -27$  is

- (a) 6
- (b) 12
- (c) 18
- (d) -18

Question 47

If two angles are complementary and one angle is  $10^\circ$  greater than the other, then the smaller angle of the two is

- (a)  $40^\circ$
- (b)  $50^\circ$

- (c)  $90^\circ$
- (d)  $180^\circ$ .

Question 48

If two angles are supplementary and one angle is double the other, then the larger angle is

- (a)  $60^\circ$
- (b)  $90^\circ$
- (c)  $120^\circ$
- (d)  $180^\circ$ .

Question 49

Twice a number is as much greater than 30 as the three times of the number less than 60. The number is

- (a) 6
- (b) 9
- (c) 12
- (d) 18.

Question 50

One number is greater than the other number by 3. The sum of two numbers is 23. The two numbers are

- (a) 13, 10
- (b) 14, 9
- (c) 12, 11
- (d) 15, 8.

## Understanding Quadrilaterals Class 8 MCQs Questions

### Question 1

What is the number of sides of a triangle?

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

### Question 2

What is the number of vertices of a triangle?

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

### Question 3

What is the number of sides of a quadrilateral?

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

### Question 4

What is the number of vertices of a quadrilateral?

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

### Question 5

How many diagonals does a quadrilateral have ?

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

### Question 6

The sum of the measures of all the three angles of a triangle is

- (a)  $90^\circ$
- (b)  $180^\circ$
- (c)  $360^\circ$
- (d)  $720^\circ$ .



Question 7

The sum of the measures of all the four angles of a quadrilateral is

- (a)  $90^\circ$
- (b)  $180^\circ$
- (c)  $360^\circ$
- (d)  $720^\circ$ .

Question 8

How many diagonals does a triangle have?

- (a) 0
- (b) 1
- (c) 2
- (d) 4

Question 9

How many diagonals does a regular hexagon have ?

- (a) 2
- (b) 0
- (c) 4
- (d) 9

Question 10

The angle sum of a convex polygon with number of sides 7 is

- (a)  $900^\circ$
- (b)  $1080^\circ$
- (c)  $1440^\circ$
- (d)  $720^\circ$ .

Question 11

The angle sum of a convex polygon with number of sides 8 is

- (a)  $720^\circ$
- (b)  $900^\circ$
- (c)  $1080^\circ$
- (d)  $1440^\circ$ .

Question 12

The angle sum of a convex polygon with number of sides 10 is

- (a)  $720^\circ$
- (b)  $900^\circ$
- (c)  $1080^\circ$
- (d)  $1440^\circ$ .

Question 13

The angle sum of a convex polygon with number of sides  $n$  is

- (a)  $(n - 2) 180^\circ$
- (b)  $(n + 2) 180^\circ$
- (c)  $(2n - 4) 180^\circ$
- (d)  $(2n + 4) 180^\circ$ .

Question 14

What is the name of a regular polygon of 3 sides?

- (a) Equilateral triangle
- (b) Square
- (c) Regular hexagon
- (d) Regular octagon.

Question 15

What is the name of a regular polygon of 6 sides?

- (a) Square
- (b) Equilateral triangle
- (c) Regular hexagon
- (d) Regular octagon

Question 16

What is the name of a regular polygon of 4 sides ?

- (a) Regular hexagon
- (b) Regular octagon
- (c) Square
- (d) Equilateral triangle

Question 17

The sum of the measures of the exterior angles of any polygon is

- (a)  $90^\circ$
- (b)  $180^\circ$
- (c)  $360^\circ$
- (d)  $720^\circ$ .

Question 18

The measures of the three angles of a quadrilateral are  $65^\circ$ ,  $75^\circ$  and  $85^\circ$ . The measure of the fourth angle is

- (a)  $65^\circ$
- (b)  $75^\circ$
- (c)  $85^\circ$
- (d)  $135^\circ$ .

Question 19

The measures of each of the four angles of a quadrilateral are equal. Find the measure of each angle.

- (a)  $45^\circ$
- (b)  $30^\circ$
- (c)  $60^\circ$
- (d)  $90^\circ$ .

Question 20

Out of the three equal angles of a quadrilateral, each measures  $70^\circ$ . The measure of the fourth angle is

- (a)  $90^\circ$
- (b)  $140^\circ$
- (c)  $150^\circ$
- (d)  $70^\circ$

Question 21

Two adjacent angles of a quadrilateral measure  $130^\circ$  and  $40^\circ$ . The sum of the remaining two angles is

- (a)  $190^\circ$
- (b)  $180^\circ$
- (c)  $360^\circ$
- (d)  $90^\circ$

Question 22

The measures of two angles of a quadrilateral are  $110^\circ$  and  $100^\circ$ . The remaining two angles are equal. The measure of each of the remaining two angles is

- (a)  $30^\circ$
- (b)  $60^\circ$
- (c)  $75^\circ$
- (d)  $45^\circ$

Question 23

The number of sides of a regular polygon, whose each exterior angle has a measure of  $45^\circ$ , is

- (a) 4
- (b) 6
- (c) 8
- (d) 10

Question 24

The measure of each exterior angle of a regular polygon of 9 sides is

- (a)  $30^\circ$
- (b)  $40^\circ$
- (c)  $60^\circ$
- (d)  $45^\circ$

Question 25

The measure of each exterior angle of a regular polygon of 15 sides is

- (a)  $30^\circ$
- (b)  $45^\circ$
- (c)  $60^\circ$
- (d)  $24^\circ$

Question 26

How many sides does a regular polygon have if the measure of an exterior angle is

24° ?

- (a) 6
- (b) 9
- (c) 15
- (d) 12.

Question 27

How many sides does a-regular polygon have if each of its interior angles is  $165^\circ$  ?

- (a) 12
- (b) 24
- (c) 9
- (d) 6

Question 28

In a regular polygon of  $n$  sides, the measure of each internal angle is

- (a)  $\frac{360^\circ}{n}$
- (b)  $\left(\frac{2n-5}{n}\right) 90^\circ$
- (c)  $n 90^\circ$
- (d)  $2n$  right angles.

Question 29.

The four angles of a pentagon are  $40^\circ$ ,  $75^\circ$ ,  $125^\circ$  and  $135^\circ$ . The measure of the fifth angle is

- (a)  $165^\circ$
- (b)  $170^\circ$
- (c)  $160^\circ$
- (d)  $175^\circ$ .

Question 30.

The sum of the internal angles of a polygon is 10 right angles. Then the number of sides is

- (a) 5
- (b) 6
- (c) 7
- (d) 8.

Question 31.

Which of the following statements is false ?

- (a) All the angles of a rectangle are equal
- (b) No angle of a rectangle can be obtuse
- (c) The diagonals of a rectangle bisect each other
- (d) The opposite sides of a rectangle are not equal.

Question 32.

Which of the following statement is false ?

- (a) A square is a rectangle whose adjacent sides are equal
- (b) A square is a rhombus whose one angle is a right angle
- (c) The diagonals of a square bisect each other at right angles
- (d) The diagonals of a square do not divide the whole square into four equal parts.

Question 33.

Which of the following statement is false ?

- (a) All the rectangles are parallelograms
- (b) All the squares are rectangles
- (c) All the parallelograms are rectangles
- (d) All the rhombuses are parallelograms.

Question 34.

Which of the following statement is true ?

- (a) All the rectangles are squares
- (b) All the parallelograms are rhombuses
- (c) All the squares are rhombuses
- (d) Each parallelogram is a trapezium.

Question 35.

Which of the following statement is true ?

- (a) All the rhombuses are squares
- (b) Each square is a parallelogram
- (c) Each parallelogram is a square
- (d) Each trapezium is a parallelogram.

Question 36.

One angle of a parallelogram is a right angle. The name of the quadrilateral is

- (a) square
- (b) rectangle
- (c) rhombus
- (d) kite.

Question 37.

Two adjacent sides of a rectangle are equal. The name of the quadrilateral is

- (a) square
- (b) kite
- (c) rhombus
- (d) none of these.

Question 38.

Which of the following statement is false ?

- (a) All the four sides of a parallelogram are equal.
- (b) The opposite angles of a parallelogram are equal
- (c) The diagonals of a parallelogram bisect each other
- (d) All the four sides of a rhombus are equal.

Question 39.

Which of the following statement is false ?

- (a) All the four angles of a rhombus are equal
- (b) The diagonals of a rhombus bisect each other at right angles
- (c) A rectangle is a parallelogram
- (d) All squares are rectangles.

Question 40.

If one angle of a parallelogram is of  $65^\circ$ , then the measure of the adjacent angle is

- (a)  $65^\circ$
- (b)  $115^\circ$
- (c)  $25^\circ$
- (d)  $90^\circ$ .

Question 41.

If  $\angle A$  of a parallelogram ABCD is of  $60^\circ$ , then the measure of the opposite angle  $\angle C$  is

- (a)  $60^\circ$
- (b)  $120^\circ$
- (c)  $30^\circ$
- (d) none of these.

Question 42.

If all the four sides of a parallelogram are equal and the adjacent angles are of  $120^\circ$  and  $60^\circ$ , then the name of the quadrilateral is

- (a) rectangle
- (b) square
- (c) rhombus
- (d) kite.

Question 43.

If the length of a side of a rhombus is 6 cm, then the perimeter of the rhombus is

- (a) 6 cm
- (b) 12 cm
- (c) 24 cm
- (d) 3 cm.

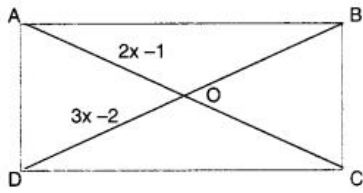
Question 44.

In a kite, what is false ?

- (a) The diagonals are perpendicular to each other
- (b) The diagonals bisect each other
- (c) Only one pair of opposite angles is equal
- (d) All the four sides are equal.

Question 45.

ABCD is a rectangle. Its diagonals meet at O.

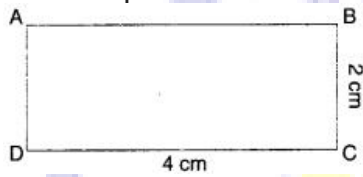


$OA = 2x - 1$ ,  $OD = 3x - 2$ . Find  $x$

- (a) 1
- (b) 2
- (c) 3
- (d) -1.

Question 46.

Find the perimeter of the rectangle ABCD.



- (a) 6 cm
- (b) 12 cm
- (c) 3 cm
- (d) 24 cm

Question 47.

The four angles of a quadrilateral are in the ratio  $1 : 2 : 3 : 4$ . The measure of its smallest angle is

- (a)  $120^\circ$
- (b)  $36^\circ$
- (c)  $18^\circ$
- (d)  $10^\circ$ .

Question 48.

In a parallelogram  $\angle A : \angle B = 1 : 2$ . Then,  $\angle A =$

- (a)  $30^\circ$
- (b)  $60^\circ$
- (c)  $45^\circ$
- (d)  $90^\circ$ .

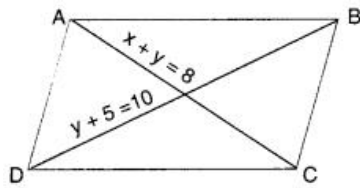
Question 49.

Two adjacent angles of a parallelogram are of equal measure. The measure of each angle of the parallelogram is

- (a)  $45^\circ$
- (b)  $30^\circ$
- (c)  $60^\circ$
- (d)  $90^\circ$ .

Question 50.

ABCD is a parallelogram as shown. Find  $x$  and  $y$ .



- (a) 1, 7
- (b) 2, 6
- (c) 3, 5
- (d) 4, 4

### Practical Geometry Class 8 MCQs Questions with Answers

Question 1.

How many sides does decagon has?

- (a) 8
- (b) 10
- (c) 6
- (d) 12

Question 2.

How many measurements can determine a quadrilateral uniquely?

- (a) 2
- (b) 3
- (c) 4
- (d) 5

Question 3.

The diagonals of a square are \_\_\_\_\_ each other

- (a) equal to
- (b) unequal to
- (c) perpendicular bisectors of
- (d) none of these

Question 4

The opposite angles of a parallelogram are \_\_\_\_\_ .

- (a) Unequal
- (b) equal
- (c) complementary
- (d) supplementary

Question 5.

What is the sum of the measures of angles of a convex quadrilaterals?

- (a)  $180^\circ$
- (b)  $90^\circ$
- (c)  $360^\circ$
- (d)  $45^\circ$



Question 6.

How many diagonals does a regular Hexagon has ?

- (a) 2
- (b) 9
- (c) 3
- (d) 5

Question 7.

How many sides does a heptagon have ?

- (a) 2
- (b) 4
- (c) 7
- (d) 5

Question 8.

Minimum possible interior angle in a regular polygon is \_\_\_\_\_.

- (a)  $70^\circ$
- (b)  $60^\circ$
- (c)  $90^\circ$
- (d)  $120^\circ$

Question 9.

The diagonals of a square bisect each other at \_\_\_\_\_ angle.

- (a) acute
- (b) right
- (c) obtuse
- (d) reflex

Question 10.

the diagonals of a rhombus bisect each other at \_\_\_\_\_ angles.

- (a) acute
- (b) right
- (c) obtuse
- (d) reflex

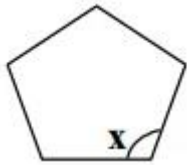
Question 11.

A parallelogram each of whose angles measures  $90^\circ$  is \_\_\_\_\_.

- (a) rectangle
- (b) rhombus
- (c) kite
- (d) trapezium

Question 12.

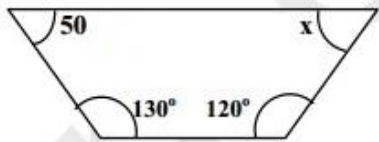
The value of x in the following figure is



- (a)  $100^\circ$
- (b)  $90^\circ$
- (c)  $108^\circ$
- (d)  $120^\circ$

Question 13.

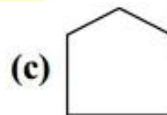
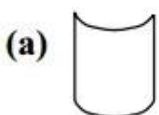
The value of (x) in the following figure is



- (a)  $120^\circ$
- (b)  $80^\circ$
- (c)  $100^\circ$
- (d)  $60^\circ$

Question 14.

Which of the following polygons is convex polygon?



Question 15.

The number of sides in a regular polygon is 15, then measure of each exterior angle is

- (a)  $24^\circ$
- (b)  $36^\circ$
- (c)  $20^\circ$
- (d)  $18^\circ$

Question 16.

The angle sum of all interior angles of a convex polygon of sides 7 is

- (a)  $180^\circ$
- (b)  $540^\circ$
- (c)  $630^\circ$
- (d)  $900^\circ$

Question 17.

Maximum number of right angles in a right angled triangle are

- (a) 2
- (b) 1
- (c) 3
- (d) 0

Question 18.

All the angles of a regular polygon are of \_\_\_\_\_.

- (a)  $90^\circ$
- (b)  $60^\circ$
- (c) equal measure
- (d) equal length

Question 19.

Polygons that have any portions of their diagonals in their exteriors are called

- (a) Squares
- (b) triangles
- (c) convex
- (d) concave

Question 20.

A polygon with minimum number of sides is

- (a) Pentagon
- (b) Square
- (c) triangle
- (d) angle

Question 21.

How many measurements are required to construct a quadrilateral, uniquely?

- (a) Four
- (b) Five
- (c) Six
- (d) Three

Question 22.

To construct a quadrilateral, we need to know two diagonals and \_\_\_\_\_ sides.

- (a) One
- (b) Two
- (c) Three
- (d) All four sides

Question 23.

If two diagonals and three sides are given, then:

- (a) A quadrilateral cannot be constructed
- (b) A quadrilateral can be constructed
- (c) Insufficient information
- (d) Any polygon can be constructed

Question 24.

If two diagonals are given, then we can construct a:

- (a) Rhombus
- (b) Rectangle
- (c) Kite
- (d) Parallelogram

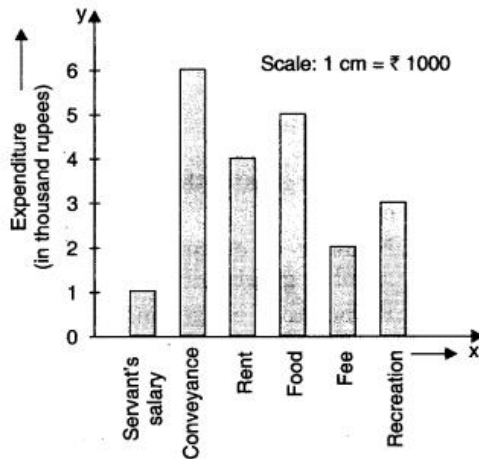
Question 25.

To construct a parallelogram we need to know:

- (a) Length of its parallel sides
- (b) Measure of interior angles
- (c) Two adjacent sides and one angle
- (d) Two adjacent sides and two angles

### Data Handling Class 8 MCQs Questions with Answers

I. Observe the following bar graph carefully and answer the following questions:



Question 1.

On which item has the maximum expenditure been done?

- (a) Conveyance
- (b) Rent
- (c) Fee
- (d) Servant's salary.

Question 2

on which item has the minimum expenditure been done?

- (a) Servant's salary
- (b) Food
- (c) Rent
- (d) Conveyance.

Question 3

What is the expenditure done on food ?

- (a) Rs 1000
- (b) Rs 2000

- (c) Rs 3000
- (d) Rs 5000.

Question 4

What is the difference of expenditures done on conveyance and rent ?

- (a) Rs 1000
- (b) Rs 2000
- (c) Rs 3000
- (d) Rs 4000.

Question 5

Rs 5000 is the expenditure done on

- (a) rent
- (b) food
- (c) fee
- (d) recreation.

Question 6

Rs 6000 is the expenditure done on

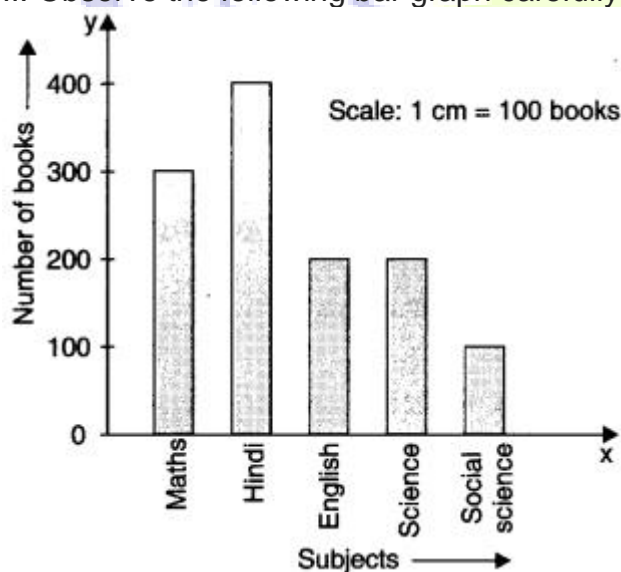
- (a) fee
- (b) rent
- (c) conveyance
- (d) food.

Question 7

How much expenditure has been done in all ?

- (a) Rs 21000
- (b) Rs 18000
- (c) Rs 15000
- (d) Rs 20000.

II. Observe the following bar graph carefully and answer the following questions:



Question 8.

Of which subject are there the maximum books?

- (a) Hindi
- (b) English
- (c) Maths
- (d) Science.

Question 9

How many books are there of the subject whose books are maximum ?

- (a) 100
- (b) 200
- (c) 300
- (d) 400.

Question 10

of which subject are there the minimum books?

- (a) Social Science
- (b) Hindi
- (c) English
- (d) Science.

Question 11

How many books are there of the subject whose books are minimum ?

- (a) 100
- (b) 200
- (c) 300
- (d) 400.

Question 12

Which two subjects have the same number of books ?

- (a) Maths and Hindi
- (b) Hindi and English
- (c) English and Science
- (d) Science and Social Science.

Question 13

300 books are of the subject

- (a) Maths
- (b) English
- (c) Hindi
- (d) Science.

Question 14

The difference of the number of books of English and Science is

- (a) 200
- (b) 100
- (c) 400
- (d) 0.

Question 15

The difference of the number of books of Hindi and Social Science is

- (a) 200
- (b) 300
- (c) 400
- (d) 100.

Question 16

The total number of books is

- (a) 1200
- (b) 1400
- (c) 1600
- (d) 1800.

Question 17

The total of the number of books of English and Science is

- (a) 200
- (b) 100
- (c) 400
- (d) 0.

III. Study the following frequency distribution table and answer the questions given below :

<i>Class interval Age (in years)</i>	<i>Number of persons</i>
15–20	12
20–25	20
25–30	42
30–35	20
35–40	6

Question 18

What is the size of the class intervals ?

- (a) 5
- (b) 10
- (c) 15
- (d) 20.

Question 19

which class has the highest frequency?

- (a) 15-20
- (b) 20-25
- (c) 25-30
- (d) 35-40.

Question 20

Which class has the lowest frequency?

- (a) 35-40
- (b) 30-35
- (c) 15-20
- (d) 25-30.

Question 21

Which two classes have the same frequency ?

- (a) 15-20 and 35-40
- (b) 20-25 and 30-35
- (c) 15-20 and 30-35
- (d) 20-25 and 25-30.

Question 22

What is the upper limit of the class interval 25-30 ?

- (a) 20
- (b) 25
- (c) 30
- (d) 35.

Question 23

What is the lower limit of the class interval 35-40 ?

- (a) 20
- (b) 25
- (c) 30
- (d) 35.

Question 24

The difference between the frequencies of the class intervals 20-25 and 30-35 is

- (a) 0
- (b) 10
- (c) 20
- (d) 5.

IV. Study the following frequency distribution table and answer the questions given below:

Daily wages	Number of Workers
290-325	5
325-360	2
360-395	4
395-430	6
430-465	7
465-500	5



Question 25

The upper limit of the fourth class is

- (a) 430
- (b) 395
- (c) 465
- (d) 500.

Question 26

The lower limit of the sixth class is

- (a) 395
- (b) 430
- (c) 465
- (d) 360.

Question 27

The size of the class intervals is

- (a) 25
- (b) 30
- (c) 40
- (d) 35.

Question 28

The frequency of the third class is

- (a) 5
- (b) 4
- (c) 2
- (d) 7.

Question 29

The number of workers getting daily wages 395-430 (in ?) is

- (a) 4
- (b) 5
- (c) 6
- (d) 7.

Question 30

Which two classes have the same frequency?

- (a) 290-325 and 465-500
- (b) 290-325 and 325-360
- (c) 430-465 and 465-500
- (d) 325-360 and 360-395.

Question 31

The class with highest frequency is

- (a) 430-465
- (b) 465-500
- (c) 395-430
- (d) 290-325.

Question 32

The class with lowest frequency is

- (a) 325-360
- (b) 360-395
- (c) 465-500
- (d) 395-430.

Question 33

The number of workers getting wages? 395 and above is

- (a) 18
- (b) 24
- (c) 12
- (d) 28.

Question 34

The number of workers getting wages below? 360 is

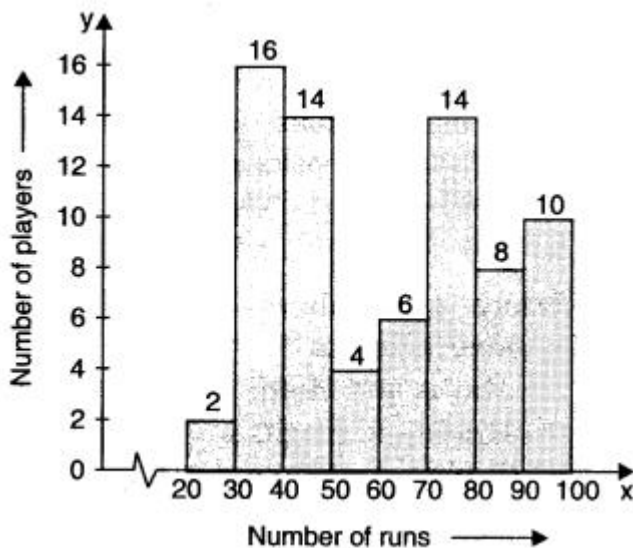
- (a) 7
- (b) 6
- (c) 5
- (d) 4.

Question 35

The total number of workers is

- (a) 29
- (b) 22
- (c) 28
- (d) 21.

V. Observe the histogram and answer the questions given below :



Question 36

Which group contains maximum players ?

- (a) 20-30

- (b) 30-40
- (c) 40-50
- (d) 70-80.

Question 37

Which group has minimum players?

- (a) 20-30
- (b) 50-60
- (c) 60-70
- (d) 30-40.

Question 38

Which two groups have the same number of players ?

- (a) 30-40 and 40-50
- (b) 20-30 and 30-40
- (c) 40-50 and 70-80
- (d) 80-90 and 90-100.

Question 39

How many players make runs 80 and above?

- (a) 2
- (b) 8
- (c) 10
- (d) 18.

Question 40

How many players make runs less than 40?

- (a) 8
- (b) 2
- (c) 18
- (d) 10.

Question 41

How many players make runs 50 to less than 60?

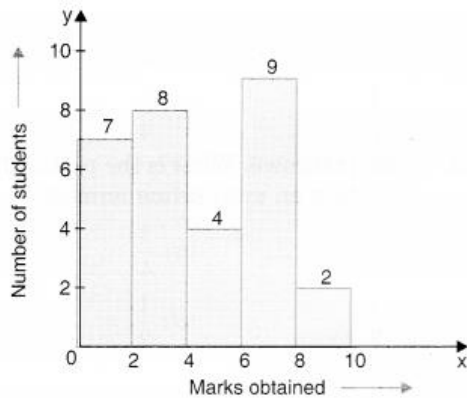
- (a) 1
- (b) 2
- (c) 3
- (d) 4

Question 42

The total number of players making runs 20 and more is

- (a) 74
- (b) 64
- (c) 84
- (d) 54.

VI. Observe the histogram and answer the questions given below :



Question 43

The total number of students is

- (a) 10
- (b) 20
- (c) 25
- (d) 30.

Question 44

Which groups contain the maximum number of students?

- (a) 2-4
- (b) 4-6
- (c) 6-8
- (d) 8-10.

Question 45

Which group contains the minimum number of students?

- (a) 0-2
- (b) 2-4
- (c) 6-8
- (d) 8-10.

Question 46

The number of students getting marks 6 and above is

- (a) 11
- (b) 10
- (c) 12
- (d) 9.

Question 47

The number of students getting marks 4 to less than 6 is

- (a) 2
- (b) 4
- (c) 6
- (d) 8.

Question 48

The number of students getting marks less than 4 is

- (a) 10
- (b) 15
- (c) 7
- (d) 8

Question 49

The number of students getting marks in the groups 4-6 or 8-10 is

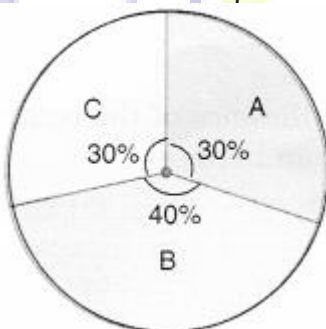
- (a) 2
- (b) 4
- (c) 6
- (d) 8.

Question 50

The number of students getting marks 6-8 is greater than the number of students getting marks 2-4 by

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

VII. Observe the pie chart given below and answer the following questions:



Question 51

The central angle for sector A is

- (a)  $108^\circ$
- (b)  $144^\circ$
- (c)  $72^\circ$
- (d)  $150^\circ$

Question 52

The central angle for sector B is

- (a)  $108^\circ$
- (b)  $144^\circ$
- (c)  $72^\circ$
- (d)  $120^\circ$ .

Question 53

Which sector has the greatest angle?

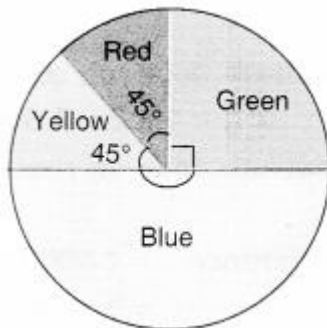
- (a) A
- (b) B
- (c) C
- (d) None of these.

Question 54

What is the difference between the central angles for sector B and sector C?

- (a)  $36^\circ$
- (b)  $72^\circ$
- (c)  $9^\circ$
- (d)  $81^\circ$ .

VII. Observe the pie chart and answer the following questions:



Question 55

Which two colours have the same central angles?

- (a) Red, yellow
- (b) Red, green
- (c) Yellow, green
- (d) Blue, red.

Question 56

Which colour has the greatest central angle?

- (a) Red
- (b) Yellow
- (c) Green
- (d) Blue.

Question 57

The proportion of sector for red is

- (a)  $\frac{1}{2}$
- (b)  $\frac{1}{4}$
- (c)  $\frac{1}{8}$
- (d)  $\frac{1}{3}$

Question 58.

The difference of the central angles for green and blue is

- (a)  $45^\circ$
- (b)  $90^\circ$
- (c)  $180^\circ$
- (d)  $22\frac{1}{2}$

Question 59.

A child has a block in the shape of a cube with one letter written on each face as shown below:



The cube is thrown once. What is the probability of getting A ?

- (a)  $\frac{1}{3}$
- (b)  $\frac{1}{6}$
- (c)  $\frac{1}{2}$
- (d)  $\frac{1}{4}$

Question 60.

A die is thrown. What is the probability of getting an even prime number ?

- (a)  $\frac{1}{6}$
- (b)  $\frac{1}{4}$
- (c)  $\frac{1}{4}$
- (d)  $\frac{1}{2}$

### Squares and Square Roots Class 8 MCQs Questions

Question 1

The perfect square number out of 2, 3, 4 and 5 is

- (a) 2
- (b) 3
- (c) 4
- (d) 5.

Question 2

A perfect square number between 30 and 40 is

- (a) 36
- (b) 32
- (c) 33
- (d) 39.

Question 3

Between 50 and 60, the perfect square number is

- (a) 56
- (b) 55
- (c) 54
- (d) none.

Question 4

Which of the following is a perfect square number ?

- (a) 1067
- (b) 7828
- (c) 4333
- (d) 625.

Question 5

Which of the following is a perfect square number?

- (a) 2222
- (b) 32543
- (c) 888
- (d) 10000.



Question 6

Which of 1322, 872, 722 and 2092 would end with digit 1?

- (a) 1322
- (b) 872
- (c) 722
- (d) 2092.

Question 7

Which of 1052, 2162, 3332 and 1112 would end with digit 1 ?

- (a) 1052
- (b) 2162
- (c) 3332
- (d) 1112.

Question 8

Which of 172, 342, 252 and 492 would have 6 at unit place ?

- (a) 172
- (b) 342
- (c) 252
- (d) 492.

Question 9

Which of 212, 332, 472 and 362 would have 6 at unit place ?

- (a) 212
- (b) 332
- (c) 472
- (d) 362.

Question 10

What will be the number of zeros in the square of the number 100 ?

- (a) 2
- (b) 4
- (c) 6
- (d) 8.

Question 11

What will be the number of zeros in the square of the number 50 ?

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 12

What will be the number of zeros in the square of the number 9000 ?

- (a) 2
- (b) 3
- (c) 4
- (d) 6.

Question 13

The square of which of the following numbers will be even?

11, 111, 1111, 112

- (a) 11
- (b) 111
- (c) 1111
- (d) 112.

Question 14

The square of which of the following numbers will be odd ?

10, 100, 1000, 99

- (a) 10
- (b) 100
- (c) 1000
- (d) 99.

Question 15.

The square of which of the following numbers will be even ?

21, 27, 35, 50

- (a) 21
- (b) 27
- (c) 35
- (d) 50

Question 16

The square of which of the following numbers will be odd ?

- (a) 42
- (b) 54
- (c) 66
- (d) 81.

Question 17

How many natural numbers lie between  $8^2$  and  $9^2$  ?

- (a) 16
- (b) 17
- (c) 18
- (d) 19.

Question 18

How many natural numbers lie between  $12^2$  and  $13^2$  ?

- (a) 20
- (b) 22
- (c) 24
- (d) 26.

Question 19

How many nonsquare numbers lie between the pair of numbers  $80^2$  and  $81^2$ ?

- (a) 162
- (b) 160
- (c) 161
- (d) 164.

Question 20

How many nonsquare numbers lie between the pair of numbers  $36^2$  and  $37^2$ ?

- (c) 36
- (b) 37
- (c) 74
- (d) 72.

Question 21

How many nonsquare numbers lie between the pair of numbers  $500^2$  and  $501^2$ ?

- (a) 1000
- (b) 999
- (c) 1001
- (d) 1002.

Question 22

Express the square number  $5^2$  as the sum of two consecutive integers.

- (a)  $12 + 13$
- (b)  $10 + 15$
- (c)  $9 + 16$
- (d)  $20 + 5$ .

Question 23

Express  $9^2$  as the sum of two consecutive integers.

- (a)  $40 + 41$
- (b)  $50 + 31$
- (c)  $36 + 45$
- (d)  $72 + 9$ .

Question 24

Express  $7^2$  as the sum of two consecutive integers.

- (a)  $40 + 9$
- (b)  $24 + 25$
- (c)  $36 + 13$
- (d)  $32 + 17$ .

Question 25

The unit digit number 132 is in the square of the

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 26

The unit digit in the square of the number 1000 is

- (a) 1
- (b) 0
- (c) 2
- (d) none of these.

Question 27

The unit digit in the square of the number 1111 is

- (a) 1
- (b) 2
- (c) 3
- (d) 4

Question 28

The unit digit in the square of the number 1333 is

- (a) 3
- (b) 6
- (c) 9
- (d) 1.

Question 29

The unit digit in the square of the number 2644 is

- (a) 4
- (b) 6
- (c) 8
- (d) 2.

Question 30

The unit digit in the square of the number 125 is

- (a) 1
- (b) 2
- (c) 5
- (d) 6

Question 31

The unit digit in the square of the number 166 is

- (a) 2
- (b) 4
- (c) 6
- (d) 8

Question 32

The unit digit in the square of the number 27 is

- (a) 7
- (b) 2
- (c) 5
- (d) 9

Question 33

The unit digit in the square of the number 78 is

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 34

The unit digit in the square of the number 209 is

- (a) 1
- (b) 2
- (c) 0
- (d) 9.

Question 35

Which of the following is not a Pythagorean triplet ?

- (a) 3, 4, 5
- (b) 6, 8, 10
- (c) 5, 12, 13
- (d) 2, 3, 4.

Question 36.

If  $10^2 = 100$ , then the square root of 100 is

- (a) 1
- (b) 10
- (c) 100
- (d) 1000.

Question 37

If  $25^2 = 625$ , then the square root of 625 is

- (a) 5
- (b) 25
- (c) 125
- (d) 625.

Question 38

What could be the possible one's digit of the square root of 625 ?

- (a) 2
- (b) 3
- (c) 4
- (d) 5.

Question 39

What could be the possible one's digit of the square root of 121?

- (a) 1, 9
- (b) 3, 4
- (c) 6, 7
- (d) 7, 8.

Question 40

What could be the possible one's digit of the square root of 361?

- (c) 1, 9
- (b) 3, 4
- (c) 6, 7
- (d) 7, 8.

Question 41

What could be the possible one's digit of the square root of 576 ?

- (o) 4, 6
- (b) 5, 7
- (c) 1, 8
- (d) 2, 9.

Question 42

What could be the possible one's digit of the square root of 676 ?

- (a) 4, 6
- (b) 5, 7
- (c) 1, 8
- (d) 2, 9.

Question 43

The smallest number by which 32 should be multiplied so as to get a perfect square is

- (a) 2
- (b) 3
- (c) 4
- (d) 8.

Question 44

The smallest number by which 48 should be multiplied so as to get a perfect square is

- (a) 2
- (b) 3
- (c) 4
- (d) 5.

Question 45

The smallest number by which 45 should be multiplied so as to get a perfect square is

- (a) 2
- (b) 3
- (c) 5
- (d) 7

Question 46

The smallest number by which 54 should be multiplied so as to get a perfect square is

- (a) 2
- (b) 3
- (c) 4
- (d) 6

Question 47

The smallest number by which 28 should be multiplied so as to get a perfect square is

- (a) 2
- (b) 4
- (c) 3
- (d) 7

Question 48

The smallest number by which 1000 should be multiplied so as to get a perfect square is

- (a) 5
- (b) 10
- (c) 4
- (d) 8

Question 49

The smallest number by which 128 should be divided so as to get a perfect square is

- (a) 2
- (b) 3
- (c) 4
- (d) 8.

Question 50

The smallest number by which 48 should be divided so as to get a perfect square is

- (a) 2
- (b) 3
- (c) 4
- (d) 6.

Question 51

The smallest number by which 125 should be divided so as to get a perfect square is

- (a) 3
- (b) 5
- (c) 25
- (d) 125.

Question 52

The smallest number by which 150 should be divided so as to get a perfect square is

- (a) 4
- (b) 2
- (c) 5
- (d) 6.

Question 53

The smallest number by which 112 should be divided so as to get a perfect square is

- (a) 6
- (b) 4
- (c) 3
- (d) 7.

Question 54

The smallest number by which 1000 should be divided so as to get a perfect square is

- (a) 5
- (b) 10
- (c) 100
- (d) 1000.

Question 55

The smallest 3-digit perfect square is

- (a) 999
- (b) 100
- (c) 961
- (d) 125.

Question 56

The number of digits in the square root of 62500 is

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 57

The number of digits in the square root of 441 is

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 58

The number of digits in the square root of 100 is

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 59

Find the length of the side of a square whose area is  $100 \text{ cm}^2$ .

- (a) 5 cm
- (b) 10 cm



- (c) 100 cm
- (d) 4 cm.

Question 60

The students of class VIII of a school donated Rs 10000 in all, for Prime Minister's National Relief Fund. Each student donated as many rupees as the number of students in the class. The number of students in the class is

- (a) 10
- (b) 100
- (c) 1000
- (d) 10000.

### Cubes and Cube Roots Class 8 MCQs Questions

Question 1

Which of the following numbers is a perfect cube ?

- (a) 125
- (b) 36
- (c) 75
- (d) 100.

Question 2

Which of the following numbers is a cube number ?

- (a) 1000
- (b) 400
- (c) 100
- (d) 600.

Question 3

Which of the following numbers is not a perfect cube?

- (a) 1331
- (b) 512
- (c) 343
- (d) 100.

Question 4

Which of the following numbers is not a cube number?

- (a) 10000
- (b) 3125
- (c) 64
- (d) 729.

Question 5

The cube of an odd natural number is

- (a) even

- (b) odd
- (c) may be even, may be odd
- (d) prime number.

Question 6

The cube of an even natural number is

- (a) even
- (b) odd
- (c) may be even, may be odd
- (d) prime number.

Question 7

The one's digit of the cube of the number 111 is

- (a) 1
- (b) 2
- (c) 3
- (d) 9.

Question 8

The one's digit of the cube of the number 242 is

- (a) 2
- (b) 4
- (c) 6
- (d) 8.

Question 9

The one's digit of the cube of the number 123 is

- (a) 3
- (b) 6
- (c) 9
- (d) 7.

Question 10

The one's digit of the cube of the number 144 is

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 11

The one's digit of the cube of the number 50 is

- (a) 1
- (b) 0
- (c) 5
- (d) 4.

Question 12

The one's digit of the cube of the number 326 is

- (a) 2
- (b) 3
- (c) 6
- (d) 4.

Question 13

The one's digit of the cube of the number 325 is

- (a) 2
- (b) 5
- (c) 3
- (d) 6.

Question 14

The one's digit of the cube of the number 347 is

- (a) 3
- (b) 4
- (c) 7
- (d) 1.

Question 15

The one's digit of the cube of the number 68 is

- (a) 1
- (b) 2
- (c) 6
- (d) 8.

Question 16

The one's digit of the cube of the number 249 is

- (a) 2
- (b) 4
- (c) 9
- (d) 1.

Question 17

What is the one's digit in the cube root of the cube number 1331 ?

- (a) 1
- (b) 2
- (c) 3
- (d) 4

Question 18

What is the one's digit in the cube root of the cube number 1000000 ?

- (a) 0
- (b) 1
- (c) 2
- (d) 9.

Question 19

What is the one's digit in the cube root of the cube number 1728 ?

- (a) 1
- (b) 2
- (c) 3
- (d) 9.

Question 20

What is the one's digit in the cube root of the cube number 2197 ?

- (a) 1
- (b) 2
- (c) 3
- (d) 7.

Question 21

What is the one's digit in the cube root of the cube number 2744 ?

- (a) 1
- (b) 2
- (c) 3
- (d) 4

Question 22

What is the one's digit in the cube root of the cube number 3375?

- (a) 2
- (b) 3
- (c) 5
- (d) 4.

Question 23

What is the one's digit in the cube root of the cube number 4096?

- (a) 2
- (b) 6
- (c) 4
- (d) 9

Question 24

What is the one's digit in the cube root of the cube number 4913?

- (a) 7
- (b) 9
- (c) 3
- (d) 6.

Question 25

What is the one's digit in the cube root of the cube number 5832?

- (a) 2
- (b) 4
- (c) 6
- (d) 8

Question 26

What is the one's digit in the cube root of the cube number 6859?

- (a) 7
- (b) 8
- (c) 9
- (d) 6.

Question 27

What is the one's digit in the cube root of the cube number 8000?

- (a) 0
- (b) 2
- (c) 4
- (d) 8.

Question 28

The number of zeroes at the end of the cube of the number 20 is

- (a) 1
- (b) 2
- (c) 3
- (d) 6.

Question 29

The number of zeroes at the end of the cube root of the cube number 1000 is

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 30

The number of zeroes at the end of the cube of the number 100 is

- (a) 1
- (b) 2
- (c) 4
- (d) 6.

Question 31

The number of zeroes at the end of the cube root of the cube number 8000000 is

- (a) 1
- (b) 2
- (c) 3
- (d) 6.

Question 32

Find the smallest number by which the number 108 must be multiplied to obtain a perfect cube.

- (a) 2
- (b) 3

- (c) 4
- (d) 5.

Question 33

Find the smallest number by which the number 250 must be divided to obtain a perfect cube.

- (a) 2
- (b) 3
- (c) 4
- (d) 5.

Question 34

Find the smallest number by which the number 72 must be multiplied to obtain a perfect cube.

- (a) 2
- (b) 3
- (c) 4
- (d) 6.

Question 35

Find the smallest number by which the number 375 must be divided to obtain a perfect cube.

- (a) 2
- (b) 3
- (c) 5
- (d) 4.

Question 36

Find the smallest number by which the number 100 must be multiplied to obtain a perfect cube.

- (a) 5
- (b) 2
- (c) 4
- (d) 10.

Question 37

Find the smallest number by which the number 10000 must be divided to obtain a perfect cube.

- (a) 2
- (b) 5
- (c) 10
- (d) 100

Question 38

Find the smallest number by which the number 200 must be multiplied to obtain a perfect cube.

- (a) 2
- (b) 10

- (c) 5
- (d) 100.

Question 39

Find the smallest number by which the number 625 must be divided to obtain a perfect cube.

- (a) 3
- (b) 5
- (c) 25
- (d) 125.

Question 40

Find the smallest number by which the number 128 must be multiplied to obtain a perfect cube.

- (a) 2
- (b) 4
- (c) 3
- (d) 8.

Question 41

Find the smallest number by which the number 256 must be divided to obtain a perfect cube.

- (a) 2
- (b) 4
- (c) 8
- (d) 16

Question 42

Find the smallest number by which the number 36 must be multiplied to obtain a perfect cube.

- (a) 6
- (b) 2
- (c) 3
- (d) 4

Question 43

Find the smallest number by which the number 1296 must be divided to obtain a perfect cube.

- (a) 6
- (b) 2
- (c) 4
- (d) 3.

Question 44

Find the smallest number by which the number 392 must be multiplied to obtain a perfect cube.

- (a) 3
- (b) 5

- (c) 7
- (d) 6.

Question 45

Find the smallest number by which the number 2401 must be divided to obtain a perfect cube.

- (a) 7
- (b) 6
- (c) 5
- (d) 9.

Question 46

Find the smallest number by which the number 121 must be multiplied to obtain a perfect cube.

- (a) 7
- (b) 9
- (c) 11
- (d) 5.

Question 47

Find the smallest number by which the number 88 must be divided to obtain a perfect cube.

- (a) 11
- (b) 5
- (c) 7
- (d) 9.

Question 48

The volume of a cube is  $64 \text{ cm}^3$ . The edge of the cube is

- (a) 4 cm
- (b) 8 cm
- (c) 16 cm
- (d) 6 cm.

Question 49

Apala makes a cuboid of plasticine of sides 5 cm, 4 cm, 2 cm. How many such cuboids will be needed to form a cube?

- (a) 20
- (b) 25
- (c) 10
- (d) 16.

Question 50

Which of the following is false ?

- (a) Cube of any odd number is odd
- (b) A perfect cube does not end with two zeroes
- (c) The cube of a single digit number may be a single digit number
- (d) There is no perfect cube which ends with 8.





### Comparing Quantities Class 8 MCQs Questions

Question 1

The ratio of 50 paise to Rs. 1 is

- (a) 1: 2
- (b) 2: 1
- (c) 1: 1
- (d) 1: 5.

Question 2

The ratio of 10 m to 1 km is

- (a) 1 : 10
- (b) 10 : 1
- (c) 1 : 100
- (d) 100 : 1.

Question 3

The ratio of 10 km per hour to 30 km per hour is

- (a) 3 : 1
- (b) 1:2
- (c) 1 : 3
- (d) 2 : 1.

Question 4

The ratio 1: 4 converted to percentage is

- (a) 50%
- (b) 25%
- (c) 75%
- (d) 4%.

Question 5

The ratio 4: 25 converted to percentage is

- (a) 8%
- (b) 4%
- (c) 16%
- (d) 25%.

Question 6

The fraction  $\frac{2}{5}$  converted to percentage is

- (a) 20%
- (b) 30%
- (c) 40%
- (d) 50%.

Question 7

The fraction  $\frac{1}{8}$  converted to percentage is

- (a)  $12\frac{1}{2}\%$
- (b) 25%
- (c) 8%
- (d) 16%.

Question 8

Out of 40 students in a class, 25% passed. How many students passed?

- (a) 20
- (b) 10
- (c) 30
- (d) 40.

Question 9

Out of 100 students of a class, 30% like to watch T.V. How many students like to watch T.V.?

- (a) 70
- (b) 50
- (c) 60
- (d) 30.

Question 10

There are 50 students in a class of which 40 are boys and the rest are girls. The ratio of the number of boys and number of girls is

- (a) 2: 3
- (b) 1: 5
- (c) 4:1
- (d) 2:5.

Question 11

40% of 50 students of a class are good at Science. How many students are not good

at Science?

- (a) 20
- (b) 30
- (c) 10
- (d) 40.

Question 12

Apala has Rs 200 with her. She spent 80% amount she had. How much money is left with her?

- (a) Rs 10
- (b) Rs 20
- (c) Rs 30
- (d) Rs 40.

Question 13

The marked price of a book is Rs 100. The shopkeeper gives 25% discount on it. What is the sale price of the book?

- (a) Rs 100
- (b) Rs 25
- (c) Rs 125
- (d) Rs 75.

Question 14

A bag is available for Rs 90. The shopkeeper allows 10% discount on the marked price. What is the marked price of the bag?

- (a) Rs 100
- (b) Rs 90
- (c) Rs 110
- (d) Rs 10.

Question 15

A toy marked at Rs 40 is available for Rs 32. What per cent discount is given on the marked price?

- (a) 10%
- (b) 20%
- (c) 25%
- (d) 40%.

Question 16

Meenu purchased a fridge for Rs 10000 and sold it for Rs 8000. Find her loss.

- (a) Rs 8000
- (b) Rs 10000
- (c) Rs 2000
- (d) Rs 12000

Question 17

Saroj purchased a fan for Rs 1000 and sold it for Rs 1200. What is her profit ?

- (a) Rs 1000

- (b) Rs 1200
- (c) Rs 200
- (d) Rs 800.

Question 18

Vimla purchased a watch for Rs 500. She sold it at a loss of 20%. Find the selling price.

- (a) Rs 500
- (b) Rs 400
- (c) Rs 300
- (d) Rs 200.

Question 19

Kanti purchased a sewing machine for Rs 2000. She sold it at a loss of 40%. Find the selling price.

- (a) Rs 1200
- (b) Rs 400
- (c) Rs 800
- (d) Rs 2800.

Question 20

Mithlesh purchased a T.V. for Rs 10000 and sold it for Rs 8000. Find her loss %.

- (a) 10%
- (b) 20%
- (c) 40%
- (d) 60%.

Question 21

Sapna purchased a cycle for Rs 1000 and sold it for Rs 1200. Find her gain%.

- (a) 20%
- (b) 10%
- (c) 40%
- (d) 12%.

Question 22

Find the simple interest on Rs 1000 for 2 years at 8% per annum.

- (a) Rs 80
- (b) Rs 40
- (c) Rs 120
- (d) Rs 160.

Question 23

A sofa-set was bought for Rs 10000. Its value depreciated at the rate of 10% per annum. Find its value after one year.

- (a) Rs 11000
- (b) Rs 9000
- (c) Rs 10000
- (d) Rs 1000.

Question 24

There are 1275 trees in Chaudhary Farm. Out of these 36% trees are of fruits. How many trees of fruits are there in Chaudhary Farm ?

- (a) 459
- (b) 549
- (c) 945
- (d) 954.

Question 25

The quantity of protein in a particular variety of pulse is 25%. Find the amount of protein in 4 kg of pulse.

- (a) 1 kg
- (b) 2 kg
- (c) 3 kg
- (d) 4 kg.

Question 26

In a mixture the amount of zinc is 45%. Find the amount of zinc in 400 g mixture.

- (a) 60 g
- (b) 120 g
- (c) 180 g
- (d) 200 g.

Question 27

In a school out of 340 students, 55% students are of Science. The remaining students are of Commerce. Find the number of students of Commerce.

- (a) 135
- (b) 153
- (c) 315
- (d) 140.

Question 28

The salary of Manish is Rs 10000. His salary gets increased by 10%. Find his increased salary.

- (a) Rs 9000
- (b) Rs 11000
- (c) Rs 8000
- (d) Rs 12000.

Question 29

A shopkeeper purchased 2 refrigerators for Rs 9800 and Rs 8200 respectively. He sold them for Rs 16920. Find loss%.

- (a) 2%
- (b) 4%
- (c) 5%
- (d) 6%.

Question 30

In selling a plot of land for Rs 61200, a profit of 20% is made. The cost price of the plot is

- (a) Rs 51000
- (b) Rs 50000
- (c) Rs 49000
- (d) Rs 52000.

Question 31

The simple interest on Rs 2000 for 4 years is Rs 400. The rate per cent of interest is

- (a)  $\frac{2000 \times 100}{400 \times 4}$
- (b)  $\frac{400 \times 4}{2000 \times 100}$
- (c)  $\frac{2000 \times 10}{400 \times 100}$
- (d)  $\frac{2000 \times 10}{2000 \times 4}$

Question 32

The simple interest of Rs 500 at the rate of 5% is Rs 100. This interest is of the time.

- (a) 1 year
- (b) 4 years
- (c) 10 years
- (d) 20 years.

Question 33

The S.I. of Rs 100 of 1 year at the rate of 3 paise per rupee per month is

- (a) Rs 30
- (b) Rs 36
- (c) Rs 24
- (d) Rs 48.

## Algebraic Expressions and Identities Class 8 MCQs Questions

Question 1

The expression  $x + 3$  is in

- (a) one variable
- (b) two variables
- (c) no variable
- (d) none of these.

Question 2

The expression  $4xy + 7$  is in

- (a) one variable
- (b) two variables
- (c) no variable
- (d) none of these.

Question 3

The expression  $x + y + z$  is in

- (a) one variable
- (b) no variable
- (c) three variables
- (d) two variables.

Question 4

The value of  $5x$  when  $x = 5$  is

- (a) 5
- (b) 10
- (c) 25
- (d) -5.

Question 5

The value of  $x^2 - 2x + 1$  when  $x = 1$  is

- (a) 1
- (b) 2

- (c) -2
- (d) 0.

Question 6

The value of  $x^2 + y^2$  when  $x = 1$ ,  $y = 2$  is

- (a) 1
- (b) 2
- (c) 4
- (d) 5.

Question 7

The value of  $x^2 - 2yx + y^2$  when  $x = 1$ ,  $y = 2$  is

- (a) 1
- (b) -1
- (c) 2
- (d) -2.

Question 8

The value of  $x^2 - xy + y^2$  when  $x = 0$ ,  $y = 1$  is

- (a) 0
- (b) -1
- (c) 1
- (d) none of these.

Question 9

Which of the following is a monomial?

- (a)  $4x^2$
- (b)  $a + 6$
- (c)  $a + 6 + c$
- (d)  $a + b + c + d$ .

Question 10

Which of the following is a binomial?

- (a)  $3xy$
- (b)  $4l + 5m$
- (c)  $2x + 3y - 5$
- (d)  $4a - 7ab + 3b + 12$ .

Question 11

Which of the following is a trinomial?

- (a)  $-7z$
- (b)  $z^2 - 4y^2$
- (c)  $x^2y - xy^2 + y^2$
- (d)  $12a - 9ab + 5b - 3$ .

Question 12

How many terms are there in the expression  $5xy^2$ ?



- (a) 1
- (b) 2
- (c) 5
- (d) 3.

Question 13

How many terms are there in the expression  $5 - 3xy$  ?

- (a) 1
- (b) 2
- (c) 3
- (d) 5.

Question 14

How many terms are there in the expression  $7x^2 + 5x - 5$  ?

- (a) 1
- (b) 2
- (c) 3
- (d) 5.

Question 15

How many terms are there in the expression  $4a - lab + 3b + 12$  ?

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 16

How many terms are there in the expression  $5xy + 9yz + 3zx + 5x - 4y$  ?

- (a) 1
- (b) 3
- (c) 4
- (d) 5.

Question 17

The coefficient in the term  $7xy$  is

- (a) 7
- (b) 3
- (c) 1
- (d) 2.

Question 18

The coefficient in the term  $-5x$  is

- (a) 5
- (b) -5
- (c) 1
- (d) 2.

Question 19

The coefficient in the term 20 is

- (a) 1
- (b) 2
- (c) 10
- (d) 20.

Question 20

The coefficient in the term -20 is

- (a) -1
- (b) -2
- (c) -10
- (d) -20.

Question 21

The like terms of the following are

- (a) x, 3x
- (b) x, 2y
- (c) 2y, 6xy
- (d) 3x, 2y

Question 22

The like terms of the following are

- (a)  $2x^2$ ,  $9x^2$
- (b)  $y^2$ , xy
- (c) xy,  $9a^2$
- (d)  $y^2$ ,  $9x^2$

Question 23

The like terms of the following are

- (a) ab, 9ba
- (b) ab, -5b
- (c) -5b, 9ba
- (d) ab, -3a

Question 24

The number of like terms in  $9x^3$ ,  $16x^2y$ ,  $-8x^3$ ,  $12xy^2$ ,  $6x^3$  is

- (a) 3
- (b) 2
- (c) 4
- (d) 5.

Question 25

The number of like terms in

abc, -abc, -bca, acb, bac,  $\frac{1}{2}$ cab is

- (a) 6
- (b) 4

- (c) 3
- (d) 2.

Question 26

The number of like terms in

$$\frac{1}{4}a^2bc, -\frac{2}{3}bca^2, \frac{2}{5}ba^2c, -\frac{1}{2}cba^2$$
 is

- (a) 4
- (b) 3
- (c) 2
- (d) 6.

Question 27

The coefficient of  $x^2y$  in  $7pqr x^2$  is

- (a)  $7pqr$
- (b)  $pqr$
- (c)  $-7pqr$
- (d) 7

Question 28

The coefficient of  $xy$  in  $xy$  is

- (a) 1
- (b) -1
- (c) 2
- (d) 3.

Question 29

The coefficient of  $x^2y$  in  $-15 x^2y$  is

- (a) 15
- (b) -15
- (c) 3
- (d) 5.

Question 30

The coefficient of  $xy$  in  $6x^2y^2$  is

- (a)  $xy$
- (b)  $2xy$
- (c)  $3xy$
- (d)  $6xy$

Question 31

The coefficient of  $xy^2z$  in  $-7x^2y^3z$  is

- (a)  $-7xy$
- (b)  $7xy$
- (c)  $-xy$
- (d)  $xy$ .

Question 32

The sum of  $7x$ ,  $10x$  and  $12x$  is

- (a)  $17x$
- (b)  $22x$
- (c)  $19x$
- (d)  $29x$ .

Question 33

The sum of  $8pq$  and  $-17pq$  is

- (a)  $pq$
- (b)  $9pq$
- (c)  $-9pq$
- (d)  $-pq$ .

Question 34

The sum of  $5x^2$ ,  $-7x^2$ ,  $8x^2$ ,  $11x^2$  and  $-9x^2$  is

- (a)  $2x^2$
- (b)  $4x^2$
- (c)  $6x^2$
- (d)  $8x^2$ .

Question 35

The sum of  $x^2 - y^2$ ,  $y^2 - z^2$  and  $z^2 - x^2$  is

- (a)  $0$
- (b)  $3x^2$
- (c)  $3y^2$
- (d)  $3z^2$ .

Question 36

What do you get when you subtract  $-3xy$  from  $5xy$ ?

- (a)  $3xy$
- (b)  $5xy$
- (c)  $8xy$
- (d)  $xy$

Question 37

The result of subtraction of  $7x$  from  $0$  is

- (a)  $0$
- (b)  $7x$
- (c)  $-7x$
- (d)  $x$

Question 38

The result of subtraction of  $3x$  from  $-4x$  is

- (a)  $-7x$
- (b)  $7x$
- (c)  $x$
- (d)  $-x$

Question 39

The product of  $4mn$  and  $0$  is

- (a)  $0$
- (b)  $1$
- (c)  $mn$
- (d)  $4\ mn$ .

Question 40

The product of  $5x$  and  $2y$  is

- (a)  $xy$
- (b)  $2xy$
- (c)  $5ay$
- (d)  $10ay$

Question 41

The product of  $7x$  and  $-12x$  is

- (a)  $84x^2$
- (b)  $-84x^2$
- (c)  $x^2$
- (d)  $-x^2$ .

Question 42

The area of a rectangle whose length and breadth are  $9y$  and  $4y^2$  respectively is

- (a)  $4y^3$
- (b)  $9y^3$
- (c)  $36y^3$
- (d)  $13y^3$

Question 43

The area of a rectangle with length  $2l^2m$  and breadth  $3lm^2$  is

- (a)  $6l^3m^3$
- (b)  $l^3m^3$
- (c)  $2l^3m^3$
- (d)  $4l^3m^3$

Question 44

The volume of a cube of side  $2a$  is

- (a)  $4a^2$
- (b)  $2a$
- (c)  $8a^3$
- (d)  $8$

Question 45

The volume of a cuboid of dimensions  $a$ ,  $b$ ,  $c$  is

- (a)  $abc$
- (b)  $a^2b^2c^2$
- (c)  $a^3b^3c^3$
- (d) none of these

Question 46.

The product of  $x^2$ ,  $-x^3$ ,  $-x^4$  is

- (a)  $x^9$
- (b)  $x^5$
- (c)  $x^7$
- (d)  $x^6$

Question 47

$(x - y)(x + y) + (y - z)(y + z) + (z - x)(z + x)$  is equal to

- (a) 0
- (b)  $x^2 + y^2 + z^2$
- (c)  $xy + yz + zx$
- (d)  $x + y + z$

Question 48

$(a + b)^2$  is equal to

- (a)  $a^2 + b^2 - 2ab$
- (b)  $a^2 + b^2 + 2ab$
- (c)  $a^2 + b^2$
- (d)  $2ab$

Question 49

$(a - b)^2$  is equal to

- (a)  $a^2 + b^2 - 2ab$
- (b)  $a^2 + b^2 + 2ab$
- (c)  $a^2 + b^2$
- (d)  $2ab$

Question 50

$a^2 - b^2$  is equal to

- (a)  $2ab$
- (b)  $-2ab$
- (c)  $(a + b)(a - b)$
- (d)  $ab$

Question 51

An algebraic expression that contains only one term is called:

- (a) Monomial
- (b) Binomial
- (c) Trinomial
- (d) None of the above

Question 52

$5x + 6y$  is a:

- (a) A. Monomial
- (b) Binomial
- (c) Trinomial
- (d) None of the above

Question 53

The algebraic expression  $3x + 2y + 6$  is

- (a) monomial
- (b) Binomial
- (c) Trinomial
- (d) None of the above

Question 54

A polynomial contains \_\_\_\_\_ number of terms:

- (a) One
- (b) Two
- (c) Three
- (d) Any

Question 55

If we add,  $7xy + 5yz - 3zx$ ,  $4yz + 9zx - 4y$  and  $-3xz + 5x - 2xy$ , then the answer is:

- (a)  $5xy + 9yz + 3zx + 5x - 4y$
- (b)  $5xy - 9yz + 3zx - 5x - 4y$
- (c)  $5xy + 10yz + 3zx + 15x - 4y$
- (d)  $5xy + 10yz + 3zx + 5x - 6y$

Question 56

If we subtract  $4a - 7ab + 3b + 12$  from  $12a - 9ab + 5b - 3$ , then the answer is:

- (a)  $8a + 2ab + 2b + 15$
- (b)  $8a + 2ab + 2b - 15$
- (c)  $8a - 2ab + 2b - 15$
- (d)  $8a - 2ab - 2b - 15$

Question 57

If we multiply  $5x$  and  $(-4xyz)$ , then we get:

- (a)  $20x^2yz$
- (b)  $-20x^2yz$
- (c)  $x^2yz$
- (d)  $-2xyz$

Question 58

The product of  $4x$  and  $0$  is:

- (a)  $4x$
- (b)  $4$
- (c)  $0$
- (d) None of the above

Question 59

The volume of a rectangle with length, breadth and height as  $5x$ ,  $3x^2$  and  $7x^4$  respectively is:

- (a)  $105x^7$
- (b)  $105x^2$

- (c)  $105x^4$
- (d)  $105x$

Question 60

In which of the following, the two expressions are like terms ?

- (a)  $7x$  and  $7y$
- (b)  $7x$  and  $9x$
- (c)  $7x$  and  $7x^2$
- (d)  $7x$  and  $7xy$

### Visualising Solid Shapes Class 8 MCQs Questions

Question 1.

The name of the shape is



- (a) cylinder
- (b) square
- (c) circle
- (d) triangle.

Question 2.

The name of the shape is

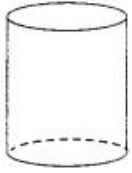


- (a) sphere
- (b) cylinder
- (c) cone
- (d) triangle.

Question 3

The name of the shape is

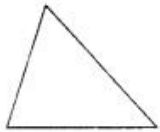




- (a) cone
- (b) sphere
- (c) cuboid
- (d) cylinder.

Question 4

The name of the shape



- (a) triangle
- (b) cone
- (c) cylinder
- (d) sphere

Question 5.

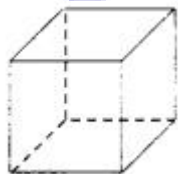
The name of the shape is



- (a) cone
- (b) circle
- (c) cylinder
- (d) cube.

Question 6

The name of the shape is



- (a) cuboid
- (b) cube
- (c) square
- (d) cylinder.

Question 7

The name of the shape is

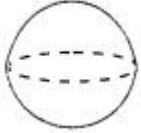


- (a) cube

- (b) cuboid
- (c) sphere
- (d) square.

Question 8

The name of the shape is



- (a) circle
- (b) sphere
- (c) cylinder
- (d) cone.

Question 9

A cuboid has how many faces ?

- (a) 2
- (b) 4
- (c) 6
- (d) 3.

Question 10

How many faces does a cube have?

- (a) 6
- (b) 4
- (c) 3
- (d) 2.

Question 11

How many vertices does a cuboid have ?

- (a) 4
- (b) 6
- (c) 8
- (d) 3

Question 12

How many vertices does a cube have?

- (a) 8
- (b) 6
- (c) 4
- (d) 2

Question 13

How many edges does a cuboid have?

- (a) 12
- (b) 8

- (c) 6
- (d) 4

Question 14

How many edges does a cube have?

- (a) 12
- (b) 6
- (c) 4
- (d) 8.

Question 15

How many faces does a triangular pyramid have?

- (a) 1
- (b) 2
- (c) 3
- (d) 4

Question 16

How many vertices does a triangular pyramid have?

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 17

How many edges does a triangular pyramid have?

- (a) 2
- (b) 4
- (c) 6
- (d) 8.

Question 18

How many faces does a triangular prism have?

- (a) 5
- (b) 4
- (c) 3
- (d) 6.

Question 19

How many vertices does a triangular prism have ?

- (a) 6
- (b) 5
- (c) 4
- (d) 3.

Question 20.

How many edges does a triangular prism have ?

- (a) 11
- (b) 9
- (c) 6
- (d) 3.

Question 21.

How many faces does a pyramid with square base have ?

- (a) 5
- (b) 3
- (c) 2
- (d) 6

Question 22

How many vertices does a pyramid with square base have ?

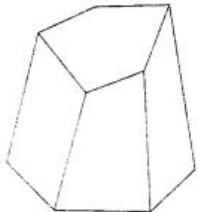
- (a) 5
- (b) 4
- (c) 3
- (d) 6.

Question 23.

How many edges does a pyramid with square base have ?

- (a) 8
- (b) 6
- (c) 4
- (d) 5.

See the following solid and answer the following questions:



Question 24.

The number of faces is

- (a) 6
- (b) 7
- (c) 8
- (d) 9.

Question 25.

The number of vertices is

- (a) 5
- (b) 7
- (c) 8
- (d) 10

Question 26.

The number of edges is

- (a) 5
- (b) 10
- (c) 20
- (d) 15.

Question 27.

For a polyhedron, if 'F' stands for number of faces, V stands for number of vertices and E stands for number of edges, then which of the following relationships is named as Euler's formula ?

- (a)  $F + V = E + 2$
- (b)  $F + E = V + 2$
- (c)  $V + E = F + 2$
- (d)  $F + V = E - 2$

Question 28.

A cube has \_\_\_\_\_ faces.

- (a) 4
- (b) 5
- (c) 6
- (d) 8

Question 29

A sphere has how many face ?

- (a) One
- (b) Two
- (c) Four
- (d) None

Question 30.

The top-view of a cone looks like:

- (a) A Circle
- (b) A Square
- (c) A Rectangle
- (d) A Triangle

Question 31

The top-view of a cube looks like a:

- (a) Circle
- (b) Square
- (c) Rectangle
- (d) Triangle

Question 32.

The base of a prism is:

- (a) Circle
- (b) Triangle
- (c) Square
- (d) Any shape

Question 33

If a polyhedron has 6 vertices and 12 edges. What is the number of faces it has ?

- (a) 6
- (b) 8
- (c) 12
- (d) 18

Question 34

Number of vertices a cone has:

- (a) One
- (b) Two
- (c) Three
- (d) Four

Question 35

An example of cone is:

- (a) Tube
- (b) A tent
- (c) A ball
- (d) A box

Question 36

The top-view of a cuboid looks like a:

- (a) Circle
- (b) Square
- (c) Rectangle
- (d) Triangle

Question 37

The side-view of a cone appears as:

- (a) Circle
- (b) Square
- (c) Rectangle
- (d) Triangle



## Mensuration Class 8 MCQs Questions

Question 1.

The diagram has the shape of a



- (a) square
- (b) rectangle
- (c) triangle
- (d) trapezium.

Question 2.

The diagram has the shape of a



- (a) rectangle
- (b) square
- (c) circle
- (d) parallelogram.

Question 3.

The diagram has the shape of a



- (a) circle
- (b) rectangle
- (c) square
- (d) triangle.

Question 4

The diagram has the shape of a



- (a) rectangle
- (b) square
- (c) parallelogram
- (d) circle.

Question 5.

The diagram has the shape of a

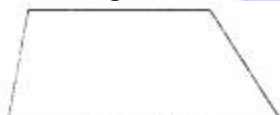




- (a) circle
- (b) square
- (c) rectangle
- (d) parallelogram

Question 6.

The diagram has the shape of a



- (a) circle
- (b) parallelogram
- (c) rectangle
- (d) trapezium.

Question 7.

The area of a rectangle of length  $a$  and breadth  $b$  is

- (a)  $a + b$
- (b)  $ab$
- (c)  $a^2 + b^2$
- (d)  $2ab$ .

Question 8

The area of a square of side  $a$  is

- (a)  $a$
- (b)  $a^2$
- (c)  $2a$
- (d)  $4a$ .

Question 9

The area of a triangle with base  $b$  and altitude  $h$  is

- (a)  $\frac{1}{2}bh$
- (b)  $bh$
- (c)  $\frac{1}{3}bh$
- (d)  $\frac{1}{4}bh$ .

Question 10.

The area of a parallelogram of base  $b$  and altitude  $h$  is

- (a)  $\frac{1}{2}bh$
- (b)  $bh$

- (c)  $\frac{1}{3}bh$   
(d)  $\frac{1}{4}bh$ .

Question 11

The area of a circle of radius  $r$  is

- (a)  $\frac{1}{2}\pi r^2$   
(b)  $r^2$   
(c)  $\pi r^2$ .  
(d)  $\frac{1}{4}\pi r^2$

Question 12

$1 \text{ cm}^3 =$

- (a)  $1000 \text{ mm}^3$   
(b)  $100 \text{ mm}^3$   
(c)  $10 \text{ mm}^3$   
(d)  $11000 \text{ mm}^3$

Question 13

$1 \text{ m}^3 =$

- (a)  $1000000 \text{ cm}^3$   
(b)  $100 \text{ cm}^3$   
(c)  $10 \text{ cm}^3$   
(d)  $\frac{1}{1000} \text{ cm}^3$

Question 14

$1 \text{ mm}^3 =$

- (a)  $0.001 \text{ cm}^3$   
(b)  $0.01 \text{ cm}^3$   
(c)  $0.1 \text{ cm}^3$   
(d)  $1000 \text{ cm}^3$

Question 15

$1 \text{ cm}^3 =$

- (a)  $0.000001 \text{ m}^3$   
(b)  $0.01 \text{ m}^3$   
(c)  $0.1 \text{ m}^3$   
(d)  $1000 \text{ m}^3$

Question 16

The surface area of a cuboid of length  $l$ , breadth  $b$  and height  $h$  is

- (a)  $lbh$   
(b)  $lb + bh + hl$   
(c)  $2(lb + bh + hl)$   
(d)  $2(l + b)h$

Question 17

The surface area of a cube of edge  $a$  is

- (a)  $4a^2$
- (b)  $6a^2$
- (c)  $3a^2$
- (d)  $a^2$ .

Question 18.

The total surface area of a cylinder of base radius  $r$  and height  $h$  is

- (a)  $2\pi r(r + h)$
- (b)  $\pi r(r + h)$
- (c)  $2\pi rh$
- (d)  $2\pi r^2$ .

Question 19

The volume of a cuboid of length  $l$ , breadth  $b$  and height  $h$  is

- (a)  $lbh$
- (b)  $lb + bh + hl$
- (c)  $2(lb + bh + hl)$
- (d)  $2(l + b)h$ .

Question 20

The volume of a cube of edge  $a$  is

- (a)  $a^2$
- (b)  $a^3$
- (c)  $a^4$
- (d)  $6a^2$

Question 21

The volume of a cylinder of base radius  $r$  and height  $h$  is

- (a)  $2\pi rh$
- (b)  $\pi r^2h$
- (c)  $2\pi r(r + h)$
- (d)  $\frac{1}{3}\pi r^2h$ .

Question 22

1 L =

- (a)  $10\text{ cm}^3$
- (b)  $100\text{ cm}^3$
- (c)  $1000\text{ cm}^3$
- (d)  $10000\text{ cm}^3$ .

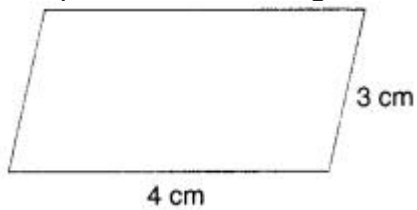
Question 23.

1  $\text{m}^3$  =

- (a) 1 L
- (b) 10 L
- (c) 100 L
- (d) 1000 L.

Question 24.

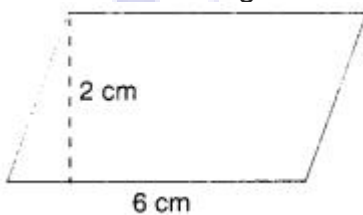
The perimeter of the figure is



- (a) 7 cm
- (b) 14 cm
- (c) 12 cm
- (d) 24 cm.

Question 25.

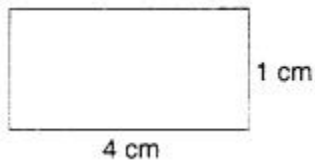
The area of the figure is



- (a)  $8 \text{ cm}^2$
- (b)  $6 \text{ cm}^2$
- (c)  $12 \text{ cm}^2$
- (d)  $16 \text{ cm}^2$

Question 26.

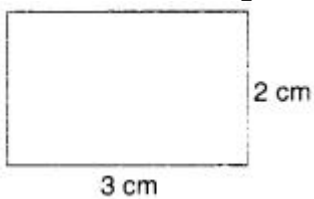
The perimeter of the figure is



- (a) 5 cm
- (b) 10 cm
- (c) 4 cm
- (d) 8 cm.

Question 27.

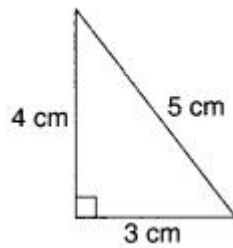
The area of the figure is



- (a)  $6 \text{ cm}^2$
- (b)  $12 \text{ cm}^2$
- (c)  $5 \text{ cm}^2$
- (d)  $10 \text{ cm}^2$

Question 28.

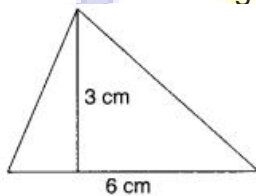
The perimeter of the figure is



- (a) 12 cm
- (b) 24 cm
- (c) 6 cm
- (d) 60 cm.

Question 29

The area of the figure is



- (a)  $9 \text{ cm}^2$
- (b)  $18 \text{ cm}^2$
- (c)  $12 \text{ cm}^2$
- (d)  $15 \text{ cm}^2$

Question 30

The perimeter of the figure is



- (a) 4 cm
- (b) 6 cm
- (c) 8 cm
- (d) 12 cm.

Question 31

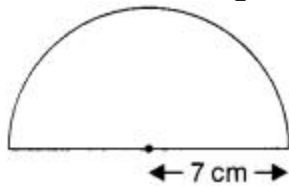
The area of the figure is



- (a)  $16 \text{ cm}^2$
- (b)  $8 \text{ cm}^2$
- (c)  $4 \text{ cm}^2$
- (d)  $12 \text{ cm}^2$

Question 32.

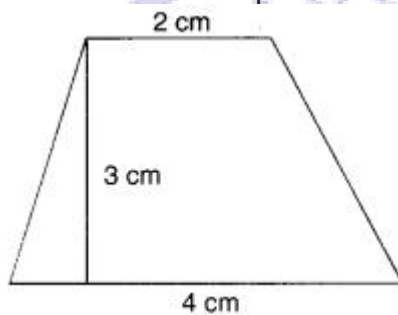
The area of the figure is



- (a)  $77 \text{ cm}^2$
- (b)  $154 \text{ cm}^2$
- (c)  $38.5 \text{ cm}^2$
- (d) none of these

Question 33

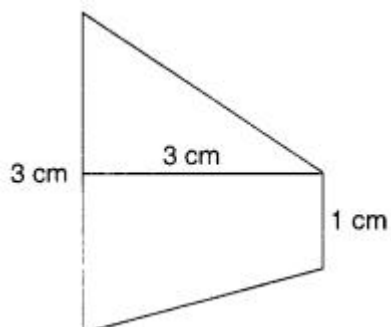
The area of the trapezium is



- (a)  $9 \text{ cm}^2$
- (b)  $6 \text{ cm}^2$
- (c)  $7 \text{ cm}^2$
- (d)  $24 \text{ cm}^2$

Question 34

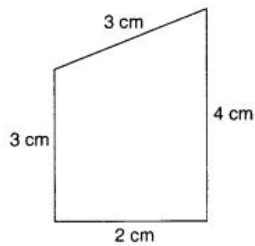
The area of the trapezium is



- (a)  $6 \text{ cm}^2$
- (b)  $4 \text{ cm}^2$
- (c)  $3 \text{ cm}^2$
- (d)  $9 \text{ cm}^2$

Question 35

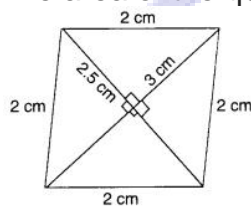
The perimeter of the trapezium is



- (a) 12 cm
- (b) 24 cm
- (c) 6 cm
- (d) 18 cm.

Question 36

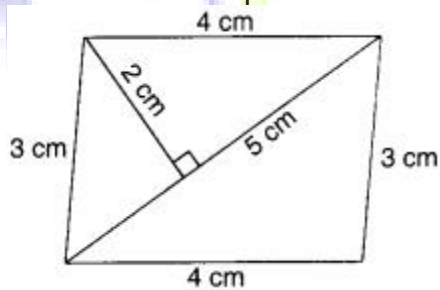
The area of the quadrilateral is



- (a)  $3.75 \text{ cm}^2$
- (b)  $7.5 \text{ cm}^2$
- (c)  $3 \text{ cm}^2$
- (d)  $10 \text{ cm}^2$

Question 37.

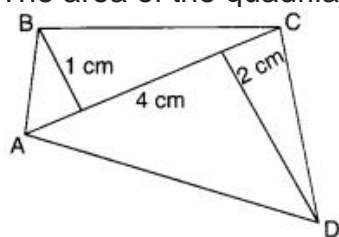
The area of the quadrilateral is



- (a)  $10 \text{ cm}^2$
- (b)  $5 \text{ cm}^2$
- (c)  $20 \text{ cm}^2$
- (d)  $15 \text{ cm}^2$

Question 38.

The area of the quadrilateral is



- (a)  $6 \text{ cm}^2$

- (b)  $12 \text{ cm}^2$
- (c)  $3 \text{ cm}^2$
- (d)  $8 \text{ cm}^2$

Question 39.

The area of a rhombus is  $60 \text{ cm}^2$ . One diagonal is 10 cm. The other diagonal is

- (a) 6 cm
- (b) 12 cm
- (c) 3 cm
- (d) 24 cm.

Question 40.

The area of a trapezium is  $40 \text{ cm}^2$ . Its parallel sides are 12 cm and 8 cm. The distance between the parallel sides is

- (a) 1 cm
- (b) 2 cm
- (c) 3 cm
- (d) 4 cm.

Question 41.

8 persons can stay in a cubical room. Each person requires  $27 \text{ m}^3$  of air. The side of the cube is

- (a) 6 m
- (b) 4 m
- (c) 3 m
- (d) 2 m.

Question 42.

If the height of a cuboid becomes zero, it will take the shape of a

- (a) cube
- (b) parallelogram
- (c) circle
- (d) rectangle.

Question 43.

The volume of a room is  $80 \text{ m}^3$ . The area of the floor is  $20 \text{ m}^2$ . The height of the room is

- (a) 1 m
- (b) 2 m
- (c) 3 m
- (d) 4 m.

Question 44.

The floor of a room is a square of side 6 m. Its height is 4 m. The volume of the room is

- (a)  $140 \text{ m}^3$
- (b)  $142 \text{ m}^3$



- (c)  $144 \text{ m}^3$
- (d)  $145 \text{ m}^3$

Question 45.

The base radius and height of a right circular cylinder are 14 cm and 5 cm respectively. Its curved surface is

- (a)  $220 \text{ cm}^2$
- (b)  $440 \text{ cm}^2$
- (c)  $1232 \text{ cm}^2$
- (d)  $2\pi \times 14 \times (14 + 5) \text{ cm}^2$

Question 46

The heights of two right circular cylinders are the same. Their volumes are respectively  $16\pi \text{ m}^3$  and  $81\pi \text{ m}^3$ . The ratio of their base radii is

- (a) 16 : 81
- (b) 4 : 9
- (c) 2 : 3
- (d) 9 : 4.

Question 47

The ratio of the radii of two right circular cylinders is 1 : 2 and the ratio of their heights is 4 : 1. The ratio of their volumes is

- (a) 1 : 1
- (b) 1 : 2
- (c) 2 : 1
- (d) 4 : 1.

Question 48.

A glass in the form of a right circular cylinder is half full of water. Its base radius is 3 cm and height is 8 cm. The volume of water is

- (a)  $18\pi \text{ cm}^3$
- (b)  $36\pi \text{ cm}^3$
- (c)  $9\pi \text{ cm}^3$
- (d)  $36 \text{ cm}^3$

Question 49

The base area of a right circular cylinder is  $16\pi \text{ cm}^2$ . Its height is 5 cm. Its curved surface area is

- (a)  $40\pi \text{ cm}^2$
- (b)  $30\pi \text{ cm}^2$
- (c)  $20\pi \text{ cm}^2$
- (d)  $10\pi \text{ cm}^2$

Question 50

The base radius and height of a right circular cylinder are 5 cm and 10 cm. Its total surface area is

- (a)  $150\pi \text{ cm}^2$
- (b)  $300\pi \text{ cm}^2$

- (c)  $150 \text{ cm}^2$
- (d)  $300 \text{ cm}^2$

Question 51

If the length and breadth of a rectangle are 10 cm and 5 cm, respectively, then its area is:

- (a) 100 sq.cm
- (b) 150 sq.cm
- (c) 115 sq.cm
- (d) 200 sq.cm

Question 52

The area of a rhombus whose diagonals are of lengths 10 cm and 8.2 cm is:

- (a)  $41 \text{ cm}^2$
- (b)  $82 \text{ cm}^2$
- (c)  $410 \text{ cm}^2$
- (d)  $820 \text{ cm}^2$

Question 53

The area of a trapezium is  $480 \text{ cm}^2$ , the distance between two parallel sides is 15 cm and one of the parallel side is 20 cm. The other parallel side is:

- (a) 20 cm
- (b) 34 cm
- (c) 44 cm
- (d) 50 cm

Question 54

The area of a rhombus is  $240 \text{ cm}^2$  and one of the diagonals is 16 cm. Find the other diagonal.

- (a) 16 cm
- (b) 20 cm
- (c) 30 cm
- (d) 36 cm

Question 55

A cuboid has \_\_\_\_\_ pairs of identical faces.

- (a) 2
- (b) 3
- (c) 4
- (d) 5

Question 56

All six faces of a cube are:

- (a) Identical
- (b) Different
- (c) Circular
- (d) Rectangular

Question 57

A cylindrical box has \_\_\_\_\_ curved surface and \_\_\_\_\_ circular faces, which are identical.

- (a) One, One
- (b) One, two
- (c) two, one
- (d) two, two

Question 58

If a cuboidal box has height, length and width as 20 cm, 15 cm and 10 cm respectively. Then its total surface area is:

- (a)  $1100 \text{ cm}^2$
- (b)  $1200 \text{ cm}^2$
- (c)  $1300 \text{ cm}^2$
- (d)  $1400 \text{ cm}^2$

Question 59

The height of a cylinder whose radius is 7 cm and the total surface area is  $968 \text{ cm}^2$  is:

- (a) 15 cm
- (b) 17 cm
- (c) 19 cm
- (d) 21 cm

Question 60

The height of a cuboid whose volume is  $275 \text{ cm}^3$  and base area is  $25 \text{ cm}^2$  is:

- (a) 10 cm
- (b) 11 cm
- (c) 12 cm
- (d) 13 cm

## Exponents and Powers Class 8 MCQs Questions

Question 1.

$a^m \times a^n$  is equal to

- (a)  $a^{m+n}$
- (b)  $a^{m-n}$
- (c)  $a^{mn}$
- (d)  $a^{n-m}$

Question 2

$a^m \div a^n$  is equal to

- (a)  $a^{m-n}$
- (b)  $a^{m+n}$
- (c)  $a^{mn}$
- (d)  $a^{n-m}$

Question 3

$(a^m)^n$  is equal to

- (a)  $a^{m+n}$
- (b)  $a^{m-n}$
- (c)  $a^{mn}$
- (d)  $a^{n-m}$

Question 4.

$a^m \times b^m$  is equal to

- (a)  $(ab)^m$
- (b)  $(ab)^{-m}$
- (c)  $a^m b$
- (d)  $ab^m$

Question 5

$a^0$  is equal to

- (a) 0
- (b) 1
- (c) -1
- (d) a.

Question 6

$\frac{a^m}{b^m}$  is equal to

- (a)  $\left(\frac{a}{b}\right)^m$
- (b)  $\left(\frac{b}{a}\right)^m$

- (c)  $(\frac{a^m}{b})^m$   
(d)  $(\frac{a}{b^m})^m$

Question 7.

$2 \times 2 \times 2 \times 2 \times 2$  is equal to

- (a)  $2^4$   
(b)  $2^3$   
(c)  $2^2$   
(d)  $2^5$

Question 8

In  $10^2$ , the exponent is

- (a) 1  
(b) 2  
(c) 10  
(d) 1

Question 9

In  $10^2$  the base is

- (a) 1  
(b) 0  
(c) 10  
(d) 100.

Question 10.

$10^{-1}$  is equal to

- (a) 10  
(b) -1  
(c)  $\frac{1}{10}$   
(d)  $\frac{1}{-10}$

Question 11

The multiplicative inverse of  $2^{-3}$  is

- (a) 2  
(b) 3  
(c) 3  
(d) 23

Question 12

The multiplicative inverse of  $10^{-5}$  is

- (a) 5  
(b) 10

- (c)  $10^{-5}$
- (d)  $10^5$ .

Question 13

The multiplicative inverse of  $\frac{1}{2^2}$  is 22

- (a)  $2^5$
- (b)  $2^2$
- (c) 2
- (d) 1.

Question 14

The multiplicative inverse of  $10^{10}$  is

- (a) 10
- (b)  $\frac{1}{10}$
- (c)  $10^{-10}$
- (d)  $10^{10}$ .

Question 15

The multiplicative inverse of  $a^m$  is

- (a) a
- (b) m
- (c)  $a^m$
- (d)  $a^{-m}$

Question 16

$5^3 \times 5^{-1}$  is equal to

- (a) 5
- (b)  $5^3$
- (c)  $5^{-1}$
- (d)  $5^2$

Question 17

$(-2)^{-5} \times (-2)^6$  is equal to

- (a) 2
- (b) -2
- (c) -5
- (d) 6.

Question 18

$3^2 \times 3^{-4} \times 3^5$  is equal to

- (a) 3
- (b)  $3^2$
- (c)  $3^3$
- (d)  $3^5$

Question 19

$(-2)^{-2}$  is equal to

- (a)  $\frac{1}{4}$
- (b)  $\frac{1}{2}$
- (c)  $-\frac{1}{2}$
- (d)  $-\frac{1}{4}$

Question 20

$(\frac{1}{2})^{-4}$  is equal to

- (a) 2
- (b)  $2^{-4}$
- (c) 1
- (d)  $2^{-4}$

Question 21

$(2^0 + 4^{-1}) \times 2^2$  is equal to

- (a) 2
- (b) 3
- (c) 4
- (d) 5

Question 22

$(2^{-1} + 3^{-1} + 5^{-1})^0$  is equal to

- (a) 2
- (b) 3
- (c) 5
- (d) 1.

Question 23

$3^m + 3^{-3} = 3^5 \Rightarrow m$  is equal to

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 24

$(-2)^{m+1} \times (-2)^4 = (-2)^6 \Rightarrow m =$

- (a) 0
- (b) 1
- (c) -1
- (d) none of these.

Question 25

$(-1)^{50}$  is equal to

- (a) -1
- (b) 1

- (c) 50
- (d) – 50.

Question 26

$(-1)^{51}$  is equal to

- (a) -1
- (b) 1
- (c) 51
- (d) -51.

Question 27

149600000000 is equal to

- (a)  $1.496 \times 10^{11}$
- (b)  $1.496 \times 10^{10}$
- (c)  $1.496 \times 10^{12}$
- (d)  $1.496 \times 10^8$ .

Question 28

300000000 is equal to

- (a)  $3 \times 10^8$
- (b)  $3 \times 10^7$
- (c)  $3 \times 10^6$
- (d)  $3 \times 10^9$

Question 29

0.000007 is equal to

- (a)  $7 \times 10^{-6}$
- (b)  $7 \times 10^{-5}$
- (c)  $7 \times 10^{-4}$
- (d)  $7 \times 10^{-3}$

Question 30

384467000 is equal to

- (a)  $3.84467 \times 10^8$
- (b)  $3.84467 \times 10^3$
- (c)  $3.84467 \times 10^7$
- (d)  $3.84467 \times 10^6$

Question 31

0.00001275 is equal to

- (a)  $1.275 \times 10^{-5}$
- (b)  $1.275 \times 10^{-3}$
- (c)  $1.275 \times 10^4$
- (d)  $1.275 \times 10^3$

Question 32

695000 is equal to



- (a)  $6.95 \times 10^5$
- (b)  $6.95 \times 10^3$
- (c)  $6.95 \times 10^6$
- (d)  $6.95 \times 10^4$

Question 33

503600 is equal to

- (a)  $5.036 \times 10^5$
- (b)  $5.036 \times 10^6$
- (c)  $5.036 \times 10^4$
- (d)  $5.036 \times 10^7$

Question 34

0.0016 is equal to

- (a)  $1.6 \times 10^{-3}$
- (b)  $1.6 \times 10^{-2}$
- (c)  $1.6 \times 10^{-4}$
- (d)  $1.6 \times 10^{-5}$

Question 35

0.000003 is equal to

- (a)  $3 \times 10^{-6}$
- (b)  $3 \times 10^6$
- (c)  $3 \times 10^5$
- (d)  $3 \times 10^{-5}$

Question 36

8848 is equal to

- (a)  $8.848 \times 10^3$
- (b)  $8.848 \times 10^2$
- (c)  $8.848 \times 10$
- (d)  $8.848 \times 10^4$

Question 37

$1.5 \times 10^{11}$  is equal to

- (a) 150000000000
- (b) 15000000000
- (c) 1500000000
- (d) 15000000000000.

Question 38

$2.1 \times 10^{-6}$  is equal to

- (a) 0.0000021
- (b) 0.000021
- (c) 0.00021
- (d) 0.0021

Question 39

$2.5 \times 10^4$  is equal to

- (a) 25
- (b) 250
- (c) 2500
- (d) 25000.

Question 40

$0.07 \times 10^{10}$  is equal to

- (a) 7000000000
- (b) 70000000
- (c) 7000
- (d) 7

Question 41

The value of  $2^{-2}$  is:

- (a) 4
- (b)  $\frac{1}{4}$
- (c) 2
- (d)  $\frac{1}{2}$

Question 42.

The multiplicative inverse of  $7^{-2}$  is:

- (a)  $7^2$
- (b) 7
- (c)  $1/7^2$
- (d)  $1/7$

Question 43.

$2^2 \times 2^3 \times 2^4$  is equal to:

- (a)  $2^{24}$
- (b)  $2^{-5}$
- (c)  $2^9$
- (d)  $2^{-9}$

Question 44.

$3^{-2} \times 3^{-5}$  is equal to:

- (a)  $3^{-7}$
- (b)  $3^{-3}$
- (c)  $3^{-10}$
- (d)  $3^7$

Question 45.

$5^4/5^2$  is equal to:

- (a)  $5^6$
- (b)  $5^{-6}$
- (c)  $5^{-2}$
- (d)  $5^2$

Question 46.

The value of  $(3^4)^3$  is:

- (a) 3
- (b)  $3^{12}$
- (c)  $3^7$
- (d) None of the above

Question 47.

$3^2 \times 4^2$  is equal to:

- (a) 121
- (b) 49
- (c) 144
- (d) 156

Question 48.

$5^7/6^7$  will give the value:

- (a)  $(5/6)^7$
- (b)  $(5/6)^0$
- (c)  $(5/6)^{-7}$
- (d)  $(6/5)^{-7}$

Question 49

$100^0 + 20^0 + 5^0$  is equal to

- (a) 125
- (b) 25
- (c)  $1/125$
- (d) 3

Question 50

If  $(-3)^{m+1} \times (-3)^5 = (-3)^7$ , then the value of m is:

- (a) 5
- (b) 7
- (c) 1
- (d) 3

### Direct and Inverse Proportions Class 8 MCQs Questions

Question 1.

10 metres of cloth cost Rs 1000. What will 4 metres cost ?

- (a) Rs 400
- (b) Rs 800
- (c) Rs 200
- (d) Rs 100.

Question 2.

15 books weigh 6 kg. What will 6 books weigh ?

- (a) 1.2 kg
- (b) 2.4 kg
- (c) 3.8 kg
- (d) 3 kg.

Question 3.

A horse eats 18 kg of com in 12 days ? How much does he eat in 9 days ?

- (a) 11.5 kg
- (b) 12.5 kg
- (c) 13.5 kg
- (d) 14.5 kg.

Question 4.

8 g of sandal wood cost Rs 40. What will 10 g cost ?

- (a) Rs 30
- (b) Rs 36
- (c) Rs 48
- (d) Rs 50.

Question 5.

20 trucks can hold 150 metric tonnes. How much will 12 trucks hold ?

- (a) 80 metric tonnes
- (b) 90 metric tonnes
- (c) 60 metric tonnes
- (d) 40 metric tonnes.

Question 6.

120 copies of a book cost Rs 600. What will 400 copies cost ?

- (a) Rs 1000
- (b) Rs 2000
- (c) Rs 3000
- (d) Rs 2400.

Question 7.

The rent of 7 hectares is Rs 875. What is the rent of 16 hectares ?

- (a) Rs 2000
- (b) Rs 1500
- (c) Rs 1600
- (d) Rs 1200.

Question 8.

A boy runs 1 km in 10 minutes. How long will he take to run 600 m ?

- (a) 2 minutes
- (b) 3 minutes
- (c) 4 minutes
- (d) 6 minutes.

Question 9.

A shot travels 90 m in 1 second. How long will it take to go 225 m ?

- (a) 2 seconds
- (b) 2.5 seconds
- (c) 4 seconds
- (d) 3.5 seconds.

Question 10.

3 knives cost Rs 63. What will 17 knives cost ?

- (a) Rs 357
- (b) Rs 375
- (c) Rs 537
- (d) Rs 573.

Question 11.

15 men can mow 40 hectares of land in 1 day. How much will 6 men mow in 1 day ?

- (a) 16 hectares
- (b) 12 hectares
- (c) 20 hectares
- (d) 24 hectares.

Question 12.

A man walks 20 km in 5 hours. How long would he take in walking 32 km ?

- (a) 3 hours
- (b) 4 hours
- (c) 6 hours
- (d) 8 hours.

Question 13.

What is the cost of 50 sticks at Rs 24 per score ?

- (a) Rs 30
- (b) Rs 40
- (c) Rs 50
- (d) Rs 60.

Question 14.

A train travels 60 km in 1 hour. How long will it take to go 150 km ?

- (a) 2 hours
- (b) 3 hours
- (c) 2.5 hours
- (d) 4 hours.

Question 15.

If 3 quintals of coal cost Rs 6000, what is the cost of 120 kg ?

- (a) Rs 1200
- (b) Rs 2400
- (c) Rs 3600
- (d) Rs 4800.

Question 16.

If 20 cows eat as much as 15 oxen, how many cows will eat as much as 36 oxen ?

- (a) 40
- (b) 44
- (c) 45
- (d) 48

Question 17.

The fare for a journey of 40 km is Rs 25. How much can be travelled for Rs40 ?

- (a) 32 km
- (b) 64 km
- (c) 50 km
- (d) 60 km.

Question 18.

Apala types 200 words in half an hour. How many words will she type in 12 minutes ?

- (a) 80
- (b) 50
- (c) 100
- (d) 60.

Question 19.

A labourer is paid Rs 400 for 2 days work. If he works for 5 days, how much will he get ?

- (a) Rs 1000
- (b) Rs 800
- (c) Rs 750
- (d) Rs 900.

Question 20.

A machine in a soft drink factory fills 600 bottles in 5 hours. How many bottles will it fill in 2 hours ?

- (a) 120
- (b) 180
- (c) 150
- (d) 240.

Question 21.

If 8 men can do a piece of work in 20 days, in how many days could 20 men do the same work ?

- (a) 6 days
- (b) 8 days
- (c) 4 days
- (d) 10 days.

Question 22.

If an amount of food last for 40 days for 120 men, how long will it last for 80 men at the same rate ?

- (a) 50 days
- (b) 60 days
- (c) 80 days
- (d) 100 days.

Question 23.

If 18 women can reap a field in 7 days, in what time can 6 women reap the same field ?

- (a) 15 days
- (b) 21 days
- (c) 30 days
- (d) 36 days.

Question 24.

10 men can dig a trench in 15 days. How long will 3 men take ?

- (a) 50 days

- (b) 60 days
- (c) 100 days
- (d) 75 days.

Question 25.

3 lambs finish eating turnips in 8 days. In how many days will 2 lambs finish them ?

- (a) 6
- (b) 8
- (c) 10
- (d) 12.

Question 26.

6 pipes are required to fill a tank in 1 hour. How long will it take if only 5 pipes of the same type are used ?

- (a) 75 minutes
- (b) 72 minutes
- (c) 80 minutes
- (d) 90 minutes.

Question 27

40 cows can graze a field in 16 days. How many cows will graze the same field in 10 days ?

- (a) 60
- (b) 64
- (c) 80
- (d) 75.

Question 28

If  $x = ky$  and when  $y = 4$ ,  $x = 8$  then  $k =$

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 29

The constant of variation, if  $x \propto y$ , from the following table is

$x$	6	12	15	21
$y$	2	4	5	7

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 30

$x$  and  $y$  vary inversely with each other. If  $x = 15$  when  $y = 6$ , then the value of  $x$  when  $y = 15$  is

- (a) 2



- (b) 4
- (c) 5
- (d) 6.

Question 31.

If  $x = 20$  and  $y = 40$ , then  $x$  and  $y$  are:

- (a) Directly proportional
- (b) Inversely proportional
- (c) Neither directly nor inversely proportional
- (d) Cannot be determined

Question 32.

If  $x = 15$  and  $y = 1/30$ , then  $x$  and  $y$  are:

- (a) Directly proportional
- (b) Inversely proportional
- (c) Neither directly nor inversely proportional
- (d) Cannot be determined

Question 33

If  $x$  and  $y$  are directly proportional, then which of the following is correct?

- (a)  $x + y = \text{constant}$
- (b)  $x - y = \text{constant}$
- (c)  $xy = \text{constant}$
- (d)  $x/y = \text{constant}$

Question 34.

If  $x$  and  $y$  are inversely proportional, then:

- (a)  $x + y = \text{constant}$
- (b)  $x - y = \text{constant}$
- (c)  $xy = \text{constant}$
- (d)  $x/y = \text{constant}$

Question 35

If  $x \propto y$  and  $x_1 = 5$ ,  $y_1 = 210$  and  $x_2 = 2$ , then find  $y_2$  ?

- (a) 200
- (b) 84
- (c) 99
- (d) 70

Question 36

If the weight of 12 sheets of thick paper is 40 grams, how many sheets of the same paper would weigh 2500 grams?

- (a) 750
- (b) 800
- (c) 850
- (d) 950

Question 37

The scale of a map is given as 1 : 300. Two cities are 4 km apart on the map. The actual distance between them is:

- (a) 1000 km
- (b) 1100 km
- (c) 1200 km
- (d) 1300 km

Question 38

If  $x$  and  $y$  are inversely proportional, then which one is true?

- (a)  $x_1/y_1 = x_2/y_2$
- (b)  $x_1/x_2 = y_1/y_2$
- (c)  $x_1/x_2 = y_2/y_1$
- (d)  $x_1 \cdot x_2 = y_1 \cdot y_2$

Question 39

6 pipes are required to fill a tank in 1 hour 20 minutes. If we use 5 such types of pipes, how much time it will take to fill the tank?

- (a) 120 minutes
- (b) 96 minutes
- (c) 80 minutes
- (d) 85 minutes

Question 40

If 12 workers can build a wall in 50 hours, how many workers will be required to do the same work in 40 hours?

- (a) 10
- (b) 13
- (c) 14
- (d) 15

### Factorisation Class 8 MCQs Questions

Question 1.

The common factor of  $x^2y^2$  and  $x^3y^3$  is

- (a)  $x^2y^2$
- (b)  $x^3y^3$
- (c)  $x^2y^3$
- (d)  $x^3y^2$

Question 2.

The common factor of  $x^3y^2$  and  $x^4y$  is

- (a)  $x^{43}y^2$
- (b)  $x^4y$
- (c)  $x^3y^2$
- (d)  $x^3y$ .

Question 3.

The common factor of  $a^2m^4$  and  $a^4m^2$  is

- (a)  $a^4m^4$
- (b)  $a^2m^2$
- (c)  $a^2m^4$
- (d)  $a^4m^2$

Question 4

The common factor of  $p^3q^4$  and  $p^4q^3$  is

- (a)  $p^4q^4$
- (b)  $p^4q^3$
- (c)  $p^3q^3$
- (d)  $p^3q^4$

Question 5

The common factor  $12y$  and  $30$  is

- (a)  $6$
- (b)  $12$

- (c) 30
- (d) 6y.

Question 6

The common factor of  $2x$ ,  $3x^3$ , 4 is

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 7.

The common factor of  $10ab$ ,  $30bc$ ,  $50ca$  is

- (a) 10
- (b) 30
- (c) 50
- (d)  $abc$ .

Question 8

The common factor of  $14a^2b$  and  $35a^4b^2$  is

- (a)  $a^4b^2$
- (b)  $35a^4b^2$
- (c)  $14a^2b$
- (d)  $7a^2b$ .

Question 9

The common factor of  $8a^2b^4c^2$ ,  $12a^4bc^4$  and  $20a^3b^4$  is

- (a)  $a^4b^4$
- (b)  $a^2b^2$
- (c)  $4a^2b^2$
- (d)  $4a^2b$ .

Question 10.

The common factor of  $6a^3b^4c^2$ ,  $21a^2b$  and  $15a^3$  is

- (a)  $3a^2$
- (b)  $3a^3$
- (c)  $6a^3$
- (d)  $6a^2$

Question 11.

The common factor of  $2a^2b^4c^2$ ,  $8a^4b^3c^4$  and  $6a^3b^4c^2$  is

- (a)  $2a^2b^3c^2$
- (b)  $6a^2b^3c^2$
- (c)  $8a^2b^3c^2$
- (d)  $a^4b^4c^4$ .

Question 12.

The common factor of  $3a^2b^4c^2$ ,  $12b^2c^4$  and  $15a^3b^4c^4$  is

- (a)  $b^4c^4$
- (b)  $3b^2c^2$
- (c)  $15b^2c^4$
- (d)  $12b^2c^4$

Question 13.

The common factor of  $24x^3y^4$ ,  $36x^4z^4$  and  $48x^3y^2z$  is

- (a)  $12x^3$
- (b)  $24x^3$
- (c)  $36x^3$
- (d)  $48x^3$

Question 14

The common factor of  $72x^3y^4z^4$ ,  $120z^2d^4x^4$  and  $96y^3z^4d^4$  is

- (a)  $96z^3$
- (b)  $120z^3$
- (c)  $72z^3$
- (d)  $24z^2$

Question 15.

The common factor of  $36p^2q^3x^4$ ,  $48pq^3x^2$  and  $54p^3q^3x^4$  is

- (a)  $6pq^3x^2$
- (b)  $36pq^3x^2$
- (c)  $54pq^3x^2$
- (d)  $48pq^3x^2$

Question 16.

The factorisation of  $12a^2b + 15ab^2$  is

- (a)  $3ab(4a + 5b)$
- (b)  $3a^2b(4a + 5b)$
- (c)  $3ab^2(4a + 5b)$
- (d)  $3a^2b^2(4a + 5b)$

Question 17.

The factorisation of  $10x^2 - 18x^3 + 14x^4$  is

- (a)  $2x^2(7x^2 - 9x + 5)$
- (b)  $2x(7x^2 - 9x + 5)$
- (c)  $2(7x^2 - 9x + 5)$
- (d)  $2x^3(7x^2 - 9x + 5)$

Question 18

The factorisation of  $6x - 42$  is

- (a)  $6(x - 7)$
- (b)  $3(x - 7)$
- (c)  $2(x - 7)$
- (d)  $6(x + 7)$

Question 19

The factorisation of  $6x + 12y$  is

- (a)  $6(x + 2y)$
- (b)  $3(x + 4y)$
- (c)  $2(3x + 12y)$
- (d) none of these

Question 20.

The factorisation of  $28a^3b^5 - 42a^5b^3$  is

- (a)  $14a^3b^3(2b^2 - 3a^2)$
- (b)  $14a^2b^3(2b^2 - 3a^2)$
- (c)  $14a^3b^2(2b^2 - 3a^2)$
- (d) none of these.

Question 21.

The factorisation of  $a^3 + a^2b + ab^2$  is

- (a)  $a(a^2 + ab + b^2)$
- (b)  $6(a^2 + ab + b^2)$
- (c)  $ab(a^2 + ab + b^2)$
- (d) none of these.

Question 22.

The factorisation of  $x^2yz + xy^2z + xyz^2$  is

- (a)  $xyz(x + y + z)$
- (b)  $x^2yz(x + y + z)$
- (c)  $xy^2z(x + y + z)$
- (d)  $xyz^2(x + y + z)$ .

Question 23.

The factorisation of  $ax^2y + bxy^2 + cxyz$  is

- (a)  $xy(ax + by + cz)$
- (b)  $axy(ax + by + cz)$
- (c)  $bxy(ax + by + cz)$
- (d)  $cxy(ax + by + cz)$ .

Question 24.

The factorisation of  $a(x + y + z) + b(x + y + z) + c(x + y + z)$  is

- (a)  $(a + b + c)(x + y + z)$
- (b)  $(ab + bc + ca)(x + y + z)$
- (c)  $(xy + yz + zx)(a + b + c)$
- (d) none of these.

Question 25.

The factorisation of  $6xy - 4y + 6 - 9x$  is

- (a)  $(3x - 2)(2y - 3)$
- (b)  $(3x + 2)(2y - 3)$

- (c)  $(3x - 2)(2y + 3)$   
(d)  $(3x + 2)(2y + 3)$ .

Question 26.

The factorisation of  $x^2 + xy + 2x + 2y$  is

- (a)  $(x + 2)(x + y)$   
(b)  $(x + 2)(x - y)$   
(c)  $(x - 2)(x + y)$   
(d)  $(x - 2)(x - y)$ .

Question 27.

The factorisation of  $ax + bx - ay - by$  is

- (a)  $(x - y)(a + b)$   
(b)  $(x + y)(a + b)$   
(c)  $(x - y)(a - b)$   
(d)  $(x + y)(a - b)$ .

Question 28.

The factorisation of  $ab - a - b + 1$  is

- (a)  $(a - 1)(b - 1)$   
(b)  $(a + 1)(b + 1)$   
(c)  $(a - 1)(b + 1)$   
(d)  $(a + 1)(b - 1)$ .

Question 29.

The factorisation of  $x^2 + x + xy + y + zx + z$  is

- (a)  $(x + y + z)(x + 1)$   
(b)  $(x + y + z)(x + y)$   
(c)  $(x + y + z)(y + z)$   
(d)  $(x + y + z)(z + x)$ .

Question 30.

The factorisation of  $x^2y^2 + xy + xy^2z + yz + x^2yz + xz$  is

- (a)  $(xy + yz + zx)(xy + 1)$   
(b)  $(xy + yz + zx)(yz + 1)$   
(c)  $(xy + yz + zx)(zx + 1)$   
(d) none of these.

Question 31.

The factorisation of  $x^2 + 8x + 16$  is

- (a)  $(x + 2)^2$   
(b)  $(x + 4)^2$   
(c)  $(x - 2)^2$   
(d)  $(x - A)^2$

Question 32.

The factorisation of  $4y^2 - 12y + 9$  is

- (a)  $(2y + 3)^2$
- (b)  $(2y - 3)^2$
- (c)  $(3y + 2)^2$
- (d)  $(3y - 2)^2$

Question 33.

The factorisation of  $49p^2 - 36$  is

- (a)  $(7p + 6)(7p - 6)$
- (b)  $(6p + 7)(6p - 7)$
- (c)  $(7p + 6)^2$
- (d)  $(7p - 6)^2$

Question 34.

The factorisation of  $y^2 - 7y + 12$  is

- (a)  $(y + 3)(y + 4)$
- (b)  $(y + 3)(y - 4)$
- (c)  $(y - 3)(y + 4)$
- (d)  $(y - 3)(y - 4)$

Question 35.

The factorisation of  $z^2 - 4z - 12$  is

- (a)  $(z + 6)(z + 2)$
- (b)  $(z - 6)(z - 2)$
- (c)  $(z - 6)(z + 2)$
- (d)  $(z + 6)(z - 2)$

Question 36.

The factorisation of  $am^2 + bm^2 + bn^2 + an^2$  is

- (a)  $(a + b)(m^2 - n^2)$
- (b)  $(a + b)(m^2 + n^2)$
- (c)  $(a - b)(m^2 + n^2)$
- (d)  $(a - b)(m^2 - n^2)$

Question 37.

The factorisation of  $(lm + l) + m + 1$  is

- (a)  $(l + 1)(m + 1)$
- (b)  $(l - 1)(m - 1)$
- (c)  $(l + 1)(m - 1)$
- (d)  $(l - 1)(m + 1)$

Question 38.

The factorisation of  $(l + m)^2 - 4lm$  is

- (a)  $(l - m)^2$
- (b)  $(l + m - 2)^2$
- (c)  $(l + m + 2)^2$
- (d) none of these.



Question 39.

The factorisation of

$$1 + p + q + r + pq + qr + pr + pqr \text{ is}$$

- (a)  $(1 + p)(1 + q)(1 + r)$
- (b)  $(1 - p)(1 - q)(1 - r)$
- (c)  $(1 - p)(1 - q)(1 + r)$
- (d)  $(1 + p)(1 - q)(1 - r)$ .

Question 40.

The value of

$$0.645 \times 0.645 + 2 \times 0.645 \times 0.355 + 0.355 \times 0.355 \text{ is}$$

- (a) 1
- (b) 0
- (c) -1
- (d) 2.

Question 41.

The factorisation  $1 + 16x + 64x^2$  is

- (a)  $(1 - 8x)^2$
- (b)  $(1 + 8x)^2$
- (c)  $(8 - x)^2$
- (d)  $(8 + x)^2$

Question 42.

The factorisation  $x^2 + x + \frac{1}{4}$  is

- (a)  $(\frac{x}{2} - 1)^2$
- (b)  $(\frac{x}{2} + 1)^2$
- (c)  $(x + \frac{1}{2})^2$
- (d)  $(x - \frac{1}{2})^2$

Question 43.

The value of  $99^2$  is

- (a)  $(90)^2 + 2(90)(9) + (9)^2$
- (b)  $(90)^2 - 2(90)(9) + (9)^2$
- (c)  $(90)^2 + (9)^2$
- (d) none of these.

Question 44.

The value of  $49^2$  is

- (a)  $(50)^2 - 2(50)(1) + (1)^2$
- (b)  $(50)^2 + 2(50)(1) + (1)^2$
- (c)  $(50)^2 - (1)^2$
- (d)  $(50)^2 + (1)^2$

Question 45.

The factorisation of  $(\frac{x^2}{y^2} - 2 + \frac{y^2}{x^2})$   $x \neq 0, y \neq 0$  is

- (a)  $(\frac{x}{y} + \frac{y}{x})^2$
- (b)  $(\frac{x}{y} - \frac{y}{x})^2$
- (c)  $(\frac{x}{y} - 1)^2$
- (d)  $(\frac{x}{y} + 1)^2$

Question 46.

The value of  $\frac{(0.73 + 0.27)(0.73 - 0.27)}{0.73 - 0.27}$  is

- (a) 1
- (b) 0
- (c) 0.73
- (d) 0.27.

Question 47.

The factorisation of  $x^2 - 9$  is

- (a)  $(x - 3)^2$
- (b)  $(x + 3)^2$
- (c)  $(x + 3)(x - 3)$
- (d) none of these.

Question 48.

The factorisation of  $36x^2y^2 - 1$  is

- (a)  $(6xy - 1)(6xy + 1)$
- (b)  $(6xy - 1)^2$
- (c)  $(6xy + 1)^2$
- (d)  $(6 + xy)^2$

Question 49.

The value of  $\frac{(0.564 \times 0.564 \times)(-0.436 \times 0.436)}{0.564 - 0.436}$  is

- (a) 0
- (b) 1
- (c) -1
- (d) none of these.

Question 50.

The value of  $(0.68)^2 - (0.32)^2$  is

- (a) -1
- (b) 0
- (c) 1
- (d) 0.36.

Question 51.

The factorisation of  $3x^2 + 10x + 8$  is

- (a)  $(3x + 4)(x + 2)$
- (b)  $(3x - 4)(x - 2)$
- (c)  $(3x + 4)(x - 2)$
- (d)  $(3x - 4)(x + 2)$

Question 52.

The factorisation of  $3x^2 - 16x + 16$  is

- (a)  $(x - 4)(3x - 4)$
- (b)  $(x + 4)(3x + 4)$
- (c)  $(x - 4)(3x + 4)$
- (d)  $(x + 4)(3x - 4)$

Question 53.

The factorisation of  $6x^2 - 5x - 6$  is

- (a)  $(2x - 3)(3x + 2)$
- (b)  $(2x + 3)(3x + 2)$
- (c)  $(2x - 3)(3x - 2)$
- (d)  $(2x + 3)(3x - 2)$

Question 54.

The factorisation of  $6 - x - 2x^2$  is

- (a)  $(2 + x)(3 - 2x)$
- (b)  $(2 + x)(3 + 2x)$
- (c)  $(2 - x)(3 - 2x)$
- (d)  $(2 - x)(3 + 2x)$

Question 55.

If  $x^2 - x - 42 = (x + k)(x + 6)$ , then  $k =$

- (a) 6
- (b) -6
- (c) 7
- (d) -7

Question 56.

The value of  $3.5 \times 3.5 - 2.5 \times 2.5$  is

- (a) -6
- (b) 6
- (c) 60
- (d) 1

Question 57.

If  $(x - \frac{1}{x})^2 = x^2 + a + \frac{1}{x^2}$  then  $a =$

- (a) -2
- (b) 2

- (c)  $2x$
- (d)  $-2x$

Question 58.

If  $x = 2$ ,  $y = -1$  then the value of  $x^2 - 4xy + 4y^2$  is

- (a) 0
- (b) 1
- (c) -1
- (d) 2

Question 59.

The quotient of  $28x^2 + 14x$  is

- (a) 2
- (b)  $2x$
- (c)  $x$
- (d)  $x^2$

Question 60.

The quotient of  $12a^8b^8 + (-a^6b^6)$  is

- (a)  $3a^2b^2$
- (b)  $3a^2b$
- (c)  $3ab^2$
- (d)  $-3a^2b^2$

Question 61.

The factorisation of  $12a^2b + 15ab^2$  gives:

- (a)  $3ab(4ab + 5)$
- (b)  $3ab(4a + 5b)$
- (c)  $3a(4a + 5b)$
- (d)  $3b(4a + 5b)$

Question 62.

The factorisation of  $12x + 36$  is

- (a)  $12(x + 3)$
- (b)  $12(3x)$
- (c)  $12(3x + 1)$
- (d)  $x(12 + 36x)$

Question 63.

On factorising  $14pq + 35pqr$ , we get:

- (a)  $pq(14 + 35r)$
- (b)  $p(14q + 35qr)$

- (c)  $q(14p + 35pr)$   
(d)  $7pq(2 + 5r)$

Question 64.

The factors of  $6xy - 4y + 6 - 9x$  are:

- (a)  $(3x + 2)(2y + 3)$   
(b)  $(3x - 2)(2y - 3)$   
(c)  $(3x - 2)(2y + 3)$   
(d)  $(3x + 2)(2y - 3)$

Question 65.

The factors of  $x^2 + xy + 8x + 8y$  are:

- (a)  $(x + y)(x + 8)$   
(b)  $(2x + y)(x + 8)$   
(c)  $(x + 2y)(x + 8)$   
(d)  $(x + y)(2x + 8)$

Question 66.

The factors of  $4y^2 - 12y + 9$  is:

- (a)  $(2y + 3)^2$   
(b)  $(2y - 3)^2$   
(c)  $(2y - 3)(2y + 3)$   
(d) None of the above

Question 67.

The factors of  $49p^2 - 36$  are:

- (a)  $(7p + 6)^2$   
(b)  $(7p - 6)^2$   
(c)  $(7p - 6)(7p + 6)$   
(d) None of the above

Question 68.

The factors of  $m^2 - 256$  are:

- (a)  $(m + 4)^2$   
(b)  $(m - 4)^2$   
(c)  $(m - 4)(m + 4)$   
(d) None of the above

Question 69.

When we factorise  $x^2 + 5x + 6$ , then we get:

- (a)  $(x + 2)(x + 3)$   
(b)  $(x - 2)(x - 3)$   
(c)  $(x \times 2) + (x \times 3)$   
(d)  $(x \times 2) - (x \times 3)$

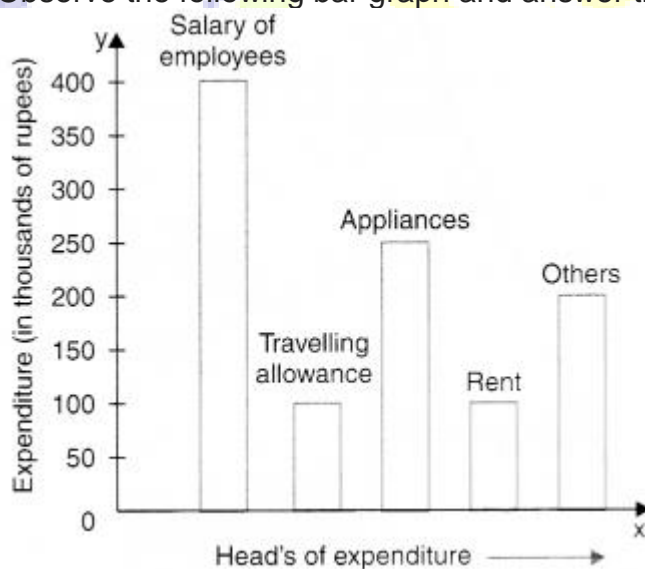
Question 70.

The factors of  $3m^2 + 9m + 6$  are:

- (a)  $(m + 1) (m + 2)$
- (b)  $3(m + 1) (m + 2)$
- (c)  $6(m + 1) (m + 2)$
- (d)  $9(m + 1) (m + 2)$

### Introduction to graphs Class 8 MCQs Questions

Observe the following bar graph and answer the related questions:



Question 1.

On which head, is the expenditure maximum ?

- (a) Travelling allowance
- (b) Rent
- (c) Appliances
- (d) Salary of employees.

Question 2.

On which head/heads, is the expenditure minimum ?

- (a) Travelling allowance/rent

- (b) Appliances
- (c) Salary of employees
- (d) Others.

Question 3.

On which two heads, is the expenditure same ?

- (a) Salary of employees and others
- (b) Travelling allowance and rent
- (c) Appliances and rent
- (d) Appliances and others.

Question 4.

What is the difference of expenditures (in thousands of rupees) on salary of employees and rent ?

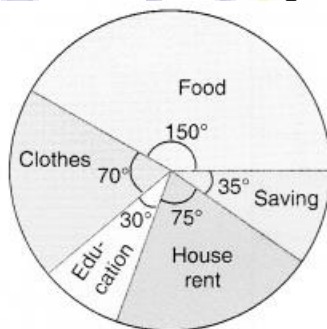
- (a) 100
- (b) 200
- (c) 300
- (d) 400.

Question 5.

What is the sum of the expenditures (in thousands of rupees) on travelling allowance and rent ?

- (a) 100
- (b) 200
- (c) 300
- (d) 400.

Observe the following circle-graph and answer the related questions:



Question 6.

On which head is the expenditure maximum ?

- (a) Food
- (b) Clothes
- (c) House rent
- (d) Education.

Question 7.

On which head is the expenditure minimum ?

- (a) Education

- (b) House rent
- (c) Food
- (d) Clothes.

Question 8.

If the budget of the family is Rs 10800, what is the saving ?

- (a) Rs 1050
- (b) Rs 1000
- (c) Rs 950
- (d) Rs 1200.

Question 9.

What is the difference of expenditures on clothes and education if the budget of the family is Rs 10800 ?

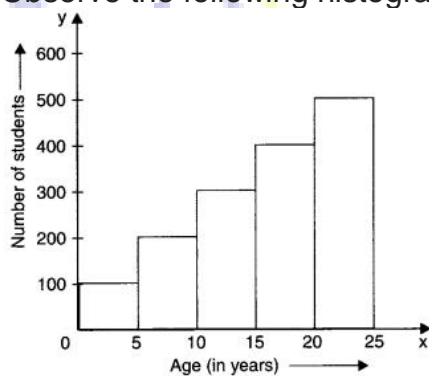
- (a) Rs 1200
- (b) Rs 1000
- (c) Rs 800
- (d) Rs 1500.

Question 10.

What is the sum of the expenditures on food and education if the budget of the family is Rs 10800 ?

- (a) Rs 5000
- (b) Rs 8000
- (c) Rs 5400
- (d) Rs 6000.

Observe the following histogram and answer the related questions:



Question 11.

In which class interval, are the maximum number of students ?

- (a) 0-5
- (b) 5-10
- (c) 20-25
- (d) 15-20.

Question 12.

In which class interval, are the minimum number of students ?



- (a) 0-5
- (b) 5-10
- (c) 10-15
- (d) 15-20.

Question 13.

In which class intervals, is the number of students 200 ?

- (a) 5-10
- (b) 0-5
- (c) 20-25
- (d) 15-20.

Question 14.

The difference in the number of students of class intervals 0-5 and 5-10 is

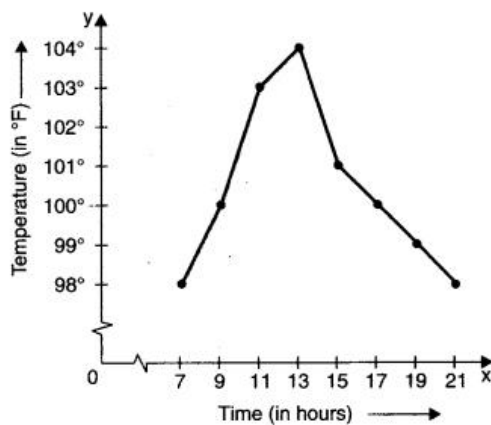
- (a) 100
- (b) 200
- (c) 300
- (d) 400.

Question 15.

The sum of the number of students in the class intervals 10-15 and 20-25 is

- (a) 800
- (b) 900
- (c) 600
- (d) 400.

Observe the following temperature time graph and answer the related questions:



Question 16.

At what time is the temperature maximum ?

- (a) 13 hours
- (b) 15 hours
- (c) 11 hours
- (d) 19 hours.

Question 17.

At what time(s) is the temperature minimum ?

- (a) 7 hours and 21 hours
- (b) 9 hours
- (c) 11 hours
- (d) 13 hours.

Question 18.

103°F temperature is at time

- (a) 11 hours
- (b) 13 hours
- (c) 15 hours
- (d) 21 hours.

Question 19.

What is the difference of temperatures at 7 hours and 21 hours ?

- (a) 0°F
- (b) 1°F
- (c) 2°F
- (d) 3°F

Question 20.

What is the rise in temperature from 11 hours to 13 hours ?

- (a) 1°F
- (b) 2°F
- (c) 4°F
- (d) 3°F.

Question 21.

What is the fall in temperature from 13 hours to 21 hours ?

- (a) 2°F
- (b) 3°F
- (c) 4°F
- (d) 6°F

Question 22.

The coordinates of the origin are

- (a ) (0, 0)
- (b) (1, 0)
- (c) (0, 1)
- (d) (1, 1).

Question 23.

What are the coordinates of a point whose x-coordinate is 3 and y-coordinate is 4?

- (a) (3, 3)
- (b) (3, 4)
- (c) (4, 3)
- (d) (4, 3).

Question 24.

What are the coordinates of a point whose x-coordinate is 1 and y-coordinate is 0?

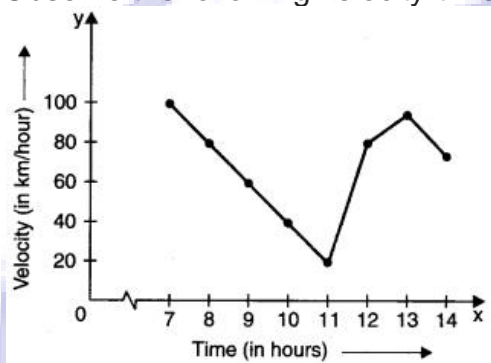
- (a) (1, 0)
- (b) (0, 0)
- (c) (0, 1)
- (d) (1, 1)

Question 25.

What are the coordinates of a point whose x-coordinate is 0 and y-coordinate is 1?

- (a) (0, 1)
- (b) (0, 0)
- (c) (1, 0)
- (d) (1, 1).

Observe the following velocity-time graph and answer the related questions:



Question 26.

At what time is the velocity maximum ?

- (a) 7
- (b) 8
- (c) 9
- (d) 10.

Question 27.

At what time is the velocity minimum ?

- (a) 8
- (b) 9
- (c) 10
- (d) 11.

Question 28.

At what times are the velocities equal ?

- (a) 8 and 12
- (b) 9 and 11
- (c) 7 and 12
- (d) 11 and 13.

Question 29.

What is the fall in velocity from 7 to 11 ?

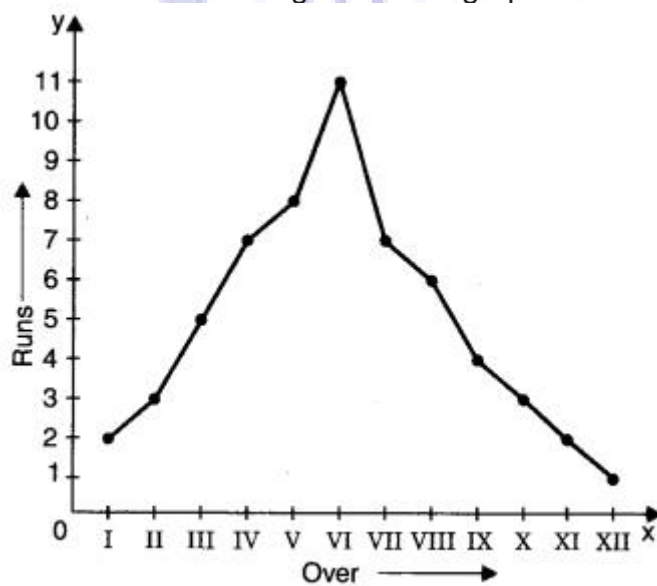
- (a) 80 km/hour
- (b) 90 km/hour
- (c) 100 km/hour
- (d) 20 km/hour.

Question 30.

What is the rise in velocity from 11 to 12?

- (a) 10 km/hour
- (b) 20 km/hour
- (c) 30 km/hour
- (d) 60 km/hour.

Observe the following runs-over graph and answer the related questions:



Question 31.

In which over are the maximum runs scored ?

- (a) II
- (b) IV
- (c) V
- (d) VI

Question 32.

In which over are the minimum runs scored ?

- (a) X
- (b) XI
- (c) XII
- (d) IX.

Question 33.

What is the difference of runs scored in IV and V overs ?

- (a) 1
- (b) 2

- (c) 3
- (d) 4.

Question 34.

What is the sum of runs scored in I and XII overs ?

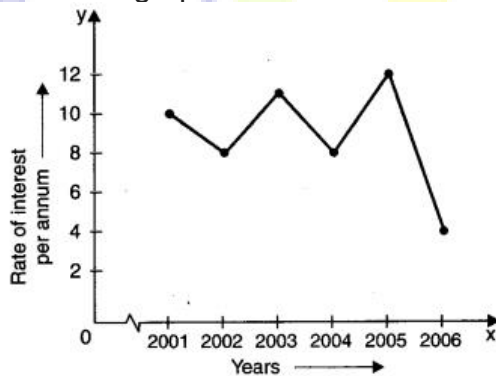
- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 35.

3 runs are scored in which overs ?

- (a) II and X
- (b) I and V
- (c) VII and VIII
- (d) X and XII

Read the graph and answer the related questions:



Question 36.

In which year was the rate of interest maximum ?

- (a) 2005
- (b) 2003
- (c) 2006
- (d) 2002.

Question 37.

In which year was the rate of interest minimum ?

- (a) 2006
- (b) 2004
- (c) 2001
- (d) 2005.

Question 38.

The difference in the maximum and minimum rates of interest was

- (a) 2%
- (b) 4%
- (c) 6%
- (d) 8%.

Question 39.

Rise in interest from 2004 to 2005 was

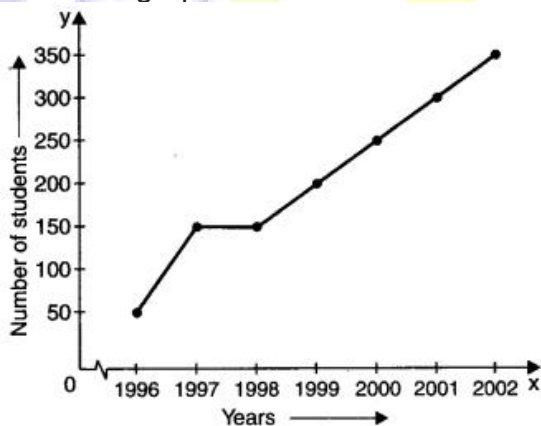
- (a) 2%
- (b) 4%
- (c) 6%
- (d) 8%.

Question 40

The fall in interest from 2001 to 2002 was

- (a) 1%
- (b) 2%
- (c) 3%
- (d) 4%.

Read the graph and answer the related questions:



Question 41.

How many students appeared in the year 2000 ?

- (a) 200
- (b) 250
- (c) 300
- (d) 350.

Question 42.

In which year did 50 students appear ?

- (a) 1998
- (b) 2001
- (c) 1997
- (d) 1996.

Question 43.

In which year did the maximum number of students appear ?

- (a) 2002
- (b) 2000
- (c) 2001
- (d) 1999.

Question 44.

What is the maximum number of students that appeared in any year ?

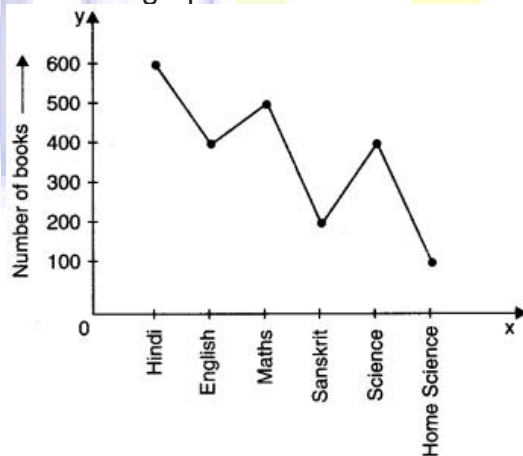
- (a) 350
- (b) 300
- (c) 250
- (d) 300.

Question 45.

In which two years was the number of students appearing was the same ?

- (a) 1997 and 1998
- (b) 1998 and 1999
- (c) 1999 and 2000
- (d) 2000 and 2001.

Read the graph and answer the related questions:



Question 46.

The maximum books are of which subject ?

- (a) Hindi
- (b) Science
- (c) English
- (d) Sanskrit.

Question 47.

The minimum books are of which subject ?

- (a) Home Science
- (b) Sanskrit
- (c) Science
- (d) English

Question 48.

500 books are of which subject ?

- (a) English
- (b) Science
- (c) Hindi
- (d) Maths

Question 49.

How many books are of subject Home Science ?

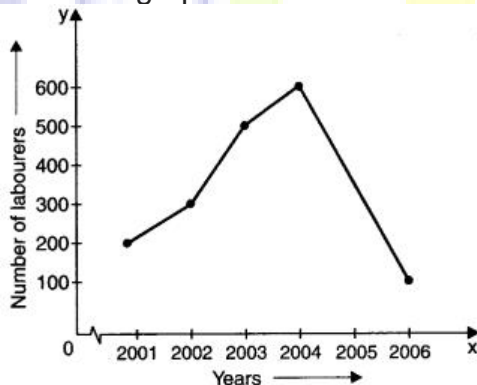
- (a) 100
- (b) 200
- (c) 300
- (d) 400.

Question 50.

How many books are there in Sanskrit and Home Science taken together ?

- (a) 100
- (b) 200
- (c) 300
- (d) 400.

Read the graph and answer the related questions:



Question 51.

In which year was the number of labourers maximum ?

- (a) 2001
- (b) 2002
- (c) 2003
- (d) 2004.

Question 52.

In which year was the number of labourers minimum ?

- (a) 2003
- (b) 2004
- (c) 2005
- (d) 2006.



Question 53.

What was the difference of the number of labourers in the years 2002 and 2003 ?

- (a) 100
- (b) 200
- (c) 300
- (d) 400.

Question 54.

Find the rise in the number of labourers from 2001 to 2004.

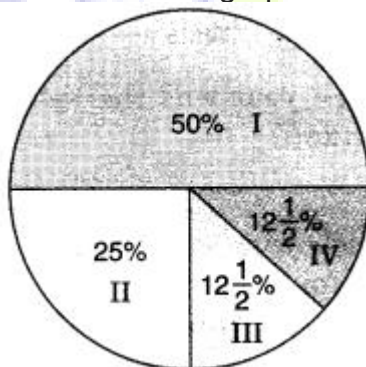
- (a) 200
- (b) 300
- (c) 400
- (d) 500.

Question 55.

Find the sum of the number of labourers in the years 2004 and 2006.

- (a) 700
- (b) 600
- (c) 200
- (d) 500.

Read the circle graph and answer the related questions:



Question 56.

There are in all 1000 students in a school. The number of students of class I are

- (a) 500
- (b) 250
- (c) 125
- (d) none of these.

Question 57.

The number of students of class II is

- (a) 500
- (b) 250
- (c) 125
- (d) 100.

Question 58.

In which two classes is the number of students the same ?

- (a) I and II
- (b) I and III
- (c) III and IV
- (d) I and IV.

Question 59.

The minimum number of students in any class is

- (a) 125
- (b) 250
- (c) 500
- (d) 1000.

Question 60.

The sum of the number of students of class III and class IV is

- (a) 500
- (b) 1000
- (c) 50
- (d) 250.

Question 61.

A \_\_\_\_\_ is a bar graph that shows data in intervals.

- (a) Bar-graph
- (b) Pie-chart
- (c) Histogram
- (d) Line Graph

Question 62.

A graph that displays data that changes continuously over periods of time is called:

- (a) Bar-graph
- (b) Pie-chart
- (c) Histogram
- (d) Line Graph

Question 63.

A line graph which is a whole unbroken line is called a:

- (a) Linear graph
- (b) Pie-chart
- (c) Histogram
- (d) Bar-grap

Question 64.

Which point lies of y-axis?

- (a) (-2, 0)
- (b) (2, 0)
- (c) (0, -2)
- (d) (2, -2)

Question 65.

If we join  $(-3,2)$ ,  $(-3,-3)$  and  $(-3,4)$ , then we obtain:

- (a) A triangle
- (b) Straight-line without passing through origin
- (c) Straight-line passing through origin
- (d) None of the above

Question 66.

The point  $(4, 0)$  lies on which of the following?

- (a) x-axis
- (b) y-axis
- (c) origin
- (d) None of the above

Question 67.

The point  $(-2,-2)$  is:

- (a) near to x-axis
- (b) near to y-axis
- (c) near to origin
- (d) Equidistant from x-axis and y-axis.

Question 68.

The point  $(-2, 5)$  is nearer to:

- (a) x-axis
- (b) y-axis
- (c) origin
- (d) None of the above

Question 69.

The point  $(-5, 2)$  is nearer to:

- (a) x-axis
- (b) y-axis
- (c) origin
- (d) None of the above

Question 70.

The point  $(0, 0)$  lies at:

- (a) x-axis
- (b) y-axis
- (c) origin
- (d) None of the above

### Playing with Numbers Class 8 MCQs Questions

Question 1.

The generalised form of the number 52 is

- (a)  $10 \times 5 + 2$
- (b)  $100 \times 5 + 2$
- (c)  $10 \times 2 + 5$
- (d)  $10 \times 5$ .

Question 2.

The generalised form of the number 33 is

- (a)  $10 \times 3 + 3$
- (b)  $10 \times 3$
- (c)  $3 + 3$
- (d)  $3 \times 3 + 3$ .

Question 3.

The number  $10 \times 7 + 5$  in usual form is

- (a) 57
- (b) 75
- (c) 55
- (d) 77.

Question 4.

The number  $10 \times 2 + 7$  in usual form is

- (a) 72
- (b) 22
- (c) 77
- (d) 21.

Question 5.

The generalised form of the number 123 is

- (a)  $1 \times 100 + 2 \times 10 + 3$
- (b)  $2 \times 100 + 3 \times 10 + 1$
- (c)  $3 \times 100 + 1 \times 10 + 2$
- (d) none of these.

Question 6.

The generalised form of the number 234 is

- (a)  $2 \times 100 + 3 \times 10 + 4$
- (b)  $3 \times 100 + 4 \times 10 + 2$
- (c)  $4 \times 100 + 2 \times 10 + 3$
- (d) none of these

Question 7.

The number  $3 \times 100 + 4 \times 10 + 5$  in usual form is

- (a) 453
- (b) 435
- (c) 354
- (d) 345.

Question 8.

The number  $5 \times 100 + 7 \times 10 + 9$  in usual form is

- (a) 795
- (b) 759
- (c) 579
- (d) 597.

Question 9.

The number  $100 \times a + 10 \times b + c$  in usual form is

- (a) abc
- (b) bca
- (c) cab
- (d) none of these.

Question 10.

The number  $100 \times b + 10 \times c + a$  in usual form is

- (a) bac
- (b) bca
- (c) cab
- (d) cba.

Question 11.

Find the value of A in the following:

$$\begin{array}{r} 1A \\ \times A \\ \hline A9 \end{array}$$

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 12.

Find the value of A, B in the following:

$$\begin{array}{r} 2A \\ + 3B \\ \hline B1 \end{array}$$

- (a) 5, 6
- (b) 5, 5
- (c) 6, 5
- (d) 6, 6.

Question 13.

Find the value of A, B in the following:

$$\begin{array}{r} AB \\ + 62 \\ \hline 9A \end{array}$$

- (a) 3, 1
- (b) 1, 1
- (c) 3, 3
- (d) 1, 3.

Question 14.

Find the value of A, B in the following:

$$\begin{array}{r} A1 \\ + 2B \\ \hline B0 \end{array}$$

- (a) 6, 9
- (b) 6, 6
- (c) 9, 6
- (d) 9, 9

Question 15.

Find the values of A, B in the following:

$$\begin{array}{r} AB \\ \times 2 \\ \hline B02 \end{array}$$

- (a) 5, 1
- (b) 5, 5
- (c) 1, 1
- (d) 1, 5.

Question 16.

Which of the following numbers is divisible by 2 ?

- (a) 19
- (b) 27

- (c) 99
- (d) 50.

Question 17.

Which of the following numbers is divisible by 2 ?

- (a) 179
- (b) 235
- (c) 500
- (d) 673.

Question 18.

Which of the following numbers is not divisible by 2 ?

- (a) 200
- (b) 40
- (c) 66
- (d) 83.

Question 19.

Which of the following numbers is not divisible by 2 ?

- (a) 54
- (b) 37
- (c) 60
- (d) 98.

Question 20.

Which of the following numbers is not divisible by 2 ?

- (a) 120
- (b) 244
- (c) 888
- (d) 179.

Question 21.

If the number  $1 \times 8$  is divisible by 3, then  $x$  is equal to

- (a) 0 or 3 or 6 or 9
- (b) 4
- (c) 5
- (d) 7.

Question 22.

If the number  $9y7$  is a multiple of 3, then  $y =$

- (a) 4
- (b) 3
- (c) 6
- (d) 2 or 5 or 8.

Question 23.

If the three-digit number  $43x$  is divisible by 9, what is the value of  $x$  ?

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 24.

If the three-digit number  $x27$  is divisible by 9, then the value of  $x$  is

- (a) 8
- (b) 7
- (c) 6
- (d) 9.

Question 25.

If the three-digit number  $6y8$  is divisible by 9, then the value of  $y$  is

- (a) 1
- (b) 2
- (c) 3
- (d) 4.

Question 26.

Which of the following numbers is not divisible by 3 ?

- (a) 123
- (b) 132
- (c) 231
- (d) 134.

Question 27.

Which of the following numbers is not divisible by 3 ?

- (a) 234
- (b) 243
- (c) 324
- (d) 457.

Question 28.

Which of the following numbers is divisible by 3 ?

- (a) 145
- (b) 237
- (c) 709
- (d) 400.

Question 29.

Which of the following numbers is divisible by 9 ?

- (a) 234
- (b) 334
- (c) 444
- (d) 434.



Question 30.

Which of the following numbers is not divisible by 9 ?

- (a) 135
- (b) 351
- (c) 513
- (d) 247.

Question 31.

Which of the following numbers is divisible by 5 ?

- (a) 125
- (b) 127
- (c) 731
- (d) 339.

Question 32.

Which of the following numbers is divisible by 5 ?

- (a) 120
- (b) 233
- (c) 348
- (d) 447.

Question 33.

Which of the following numbers is not divisible by 5 ?

- (a) 120
- (b) 235
- (c) 355
- (d) 477.

Question 34.

Which of the following numbers is divisible by 10?

- (a) 40
- (b) 35
- (c) 57
- (d) 69.

Question 35.

Which of the following numbers is divisible by 10?

- (a) 235
- (b) 3400
- (c) 278
- (d) 1277.

Question 36.

Which of the following numbers is not divisible by 10?

- (a) 120
- (b) 340
- (c) 760
- (d) 1246.

Question 37.

The usual form of  $100 \times 7 + 10 \times 1 + 8$  is:

- (a) 108
- (b) 708
- (c) 718
- (d) 170

Question 38.

Which of the following numbers are not divisible by 5?

- (a) 20
- (b) 125
- (c) 122
- (d) 200

Question 39.

Which of the following numbers are divisible by 10?

- (a) 99
- (b) 45
- (c) 110
- (d) 75

Question 40.

Which of the following are divisible by 2?

- (a) 98
- (b) 99
- (c) 101
- (d) 121

Question 41.

If a number is divisible 9, then it is divisible by:

- (a) 6
- (b) 7
- (c) 3
- (d) 11

Question 42.

If the three digit number  $24x$  is divisible by 9, the value of  $x$  is:

- (a) 3
- (b) 7
- (c) 1
- (d) None of the above

Question 43.

The number 2146587 is divisible by:

- (a) 7
- (b) 3
- (c) 11
- (d) None of the above

Question 44.

The general form of  $abc$  is:

- (a)  $100a + 10b + c$
- (b)  $100b + 10c + a$
- (c)  $100c + 10a + b$
- (d) None of the above

Question 45.

The generalised form of 129 is:

- (a)  $100 + 90 + 2$
- (b)  $100 + 20 + 9$
- (c)  $100 + 2 + 9$
- (d) None of the above

