Practice Test 1 GED Math

1. Raymond is ordering these expressions, so he would first like to find the expressions with the greatest value. Which is the greatest value?

a. $\sqrt{25}$

b. $\sqrt[3]{5}$

c. $\sqrt{8}$

d. $\sqrt[3]{10}$

2. You can read the number 5^3 as five to the third power, or five cubed, and can simplify it to

_____.

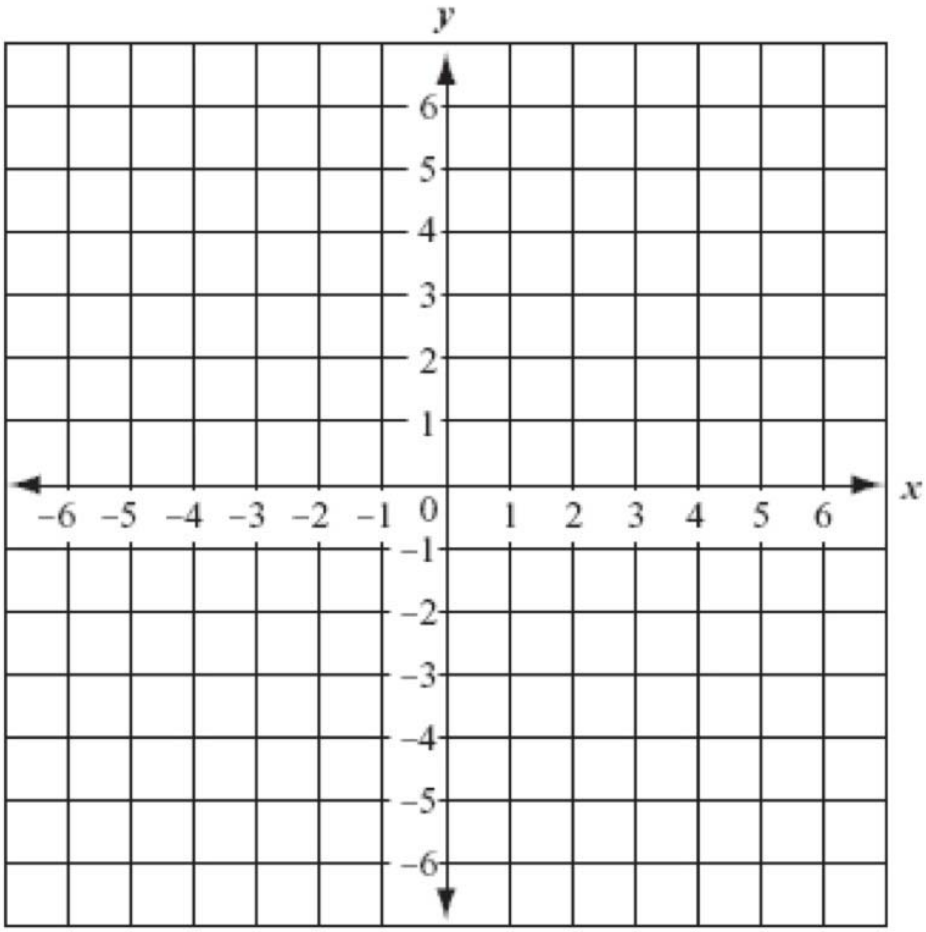
3. How many different ways can 6 different positions be filled by 12 applicants?

_____

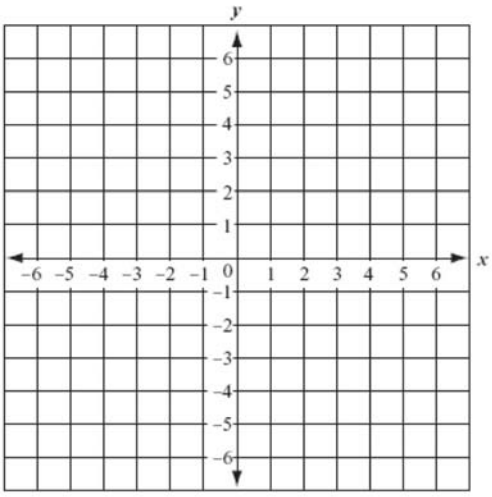
4. Solve using the quadratic formula. $\frac{-b\pm\sqrt{b^2-4ac}}{2a}$

x^2 - 5x - 14= 0

5. Plot the points (-5, 4) and (5, -4). What is the slope of the line? _____

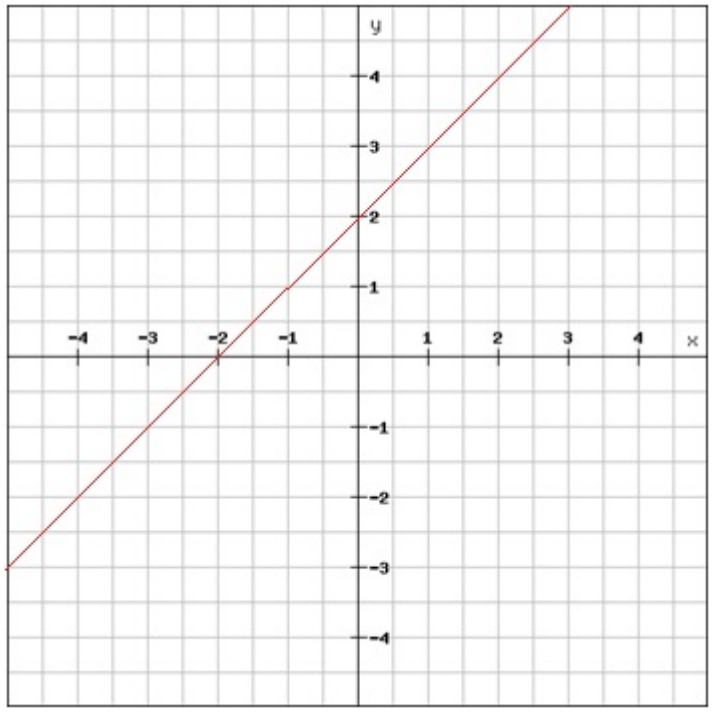


6. To graph the line, plot the points (x, y) from the table and connect the points to form the line.



X	Y
0	3
1	5
2	7

7. Answer the following questions.



Which ordered pair(s) represent

Solutions to the equation of the line?

a. (-1, 1)

b. (-1, -1)

c. (2, -4)

d. (-2, 0)

e. (4, -1)

8. What is the slope of a line with ordered pairs, (2, 1) and (3, 5)?

9. Use the following data. 15, 24, 32, 46, 46, 58.

Match the measures on the left with the values on the right.

1. Median	a. 39
2. Mode	b. 36.83
3. Mean	c. 43
4. Range	d. 46

10. Setting an average as a goal.

You want to earn a 90% in a class. On the first three tests you scored a 90%, an 89%, and a 95%. What percent would you need on the fourth test to earn a 90%? Write it as an equation, then solve.

11. The average human heart pumps 114,000 gallons of blood per day. Which of the following expressions represents that amount in scientific notation?

a. 1.14 x 10^{-5}

b. 1.14 x 10^{-4}

c. 1.14 x 10^{3}

d. 1.14 x 10^{5}

e. 1.14 x 10^{6}

12. The sum of three odd numbers (consecutive) is 135. What are the numbers?

a. 41, 43, and 45

b. 43, 45, and 47

c. 44, 45, and 46

d. 44, 46, and 48

e. 45, 47, and 49

13. Fingernails grow approximately 2.8 x 10^{-3} inches per day. What is this distance written in standard notation?

a. 0.28

b. 0.0028

c. 280

d. 28.0

e. 0000.28

Find Each Value:

14. 3^{-2} 15. 5^{0} 16. 18^{1} 17. 10^{5} 18. 9^{-2} 19. 15^{3}

20. In the equation -2 (x+4) = 5x + 6, what is the value of x?

a. -2

b. - $\frac{1}{2}$

c. 1

d. $\frac{1}{2}$

e. 2

21. Which of the following expresses this equation?

$$x + 4 = \frac{x}{5} - 6$$

a. Four more than x equals 6 less than the quotient of 5 and x

b. The sum of 4 and x is the same as 6 less than the quotient of x and 5

c. Four increased by x equals the difference of x and 6 divided by 5

22. The sum of three consecutive even numbers is 138. What is the greatest number?

a. 52

b. 50

c. 48

d. 46

e. 44

23. Jonathan drives an average speed of 62 miles per hour for $4\frac{1}{2}$ hours. How many miles does he travel?

a. 67

b. 137

c. 248

d. 279

24. What is the value of $-4x - \frac{3y}{2x}$, when x = -4 and y = 8?

a. -19

b. -13

c. 10

d. 13

e. 19

25. A label on the grocery store shelf states that the store brand of shampoo sells for 14.5 cents per ounce. What is the cost of a 24 oz. bottle of shampoo?

a. $ 0.60

b. $ 1.66

c. $ 3.48

d. $ 6.00

e. $7.65

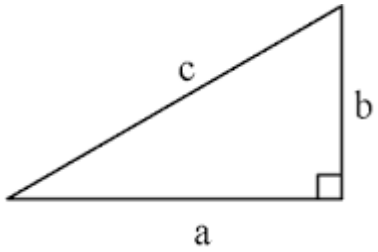
26. Two times a number is no more than that number plus 12. (Write the inequality from the verbal description.)

_____

27. Twice a number divided by 4 is 16. What is the number?

28. Solve. Then graph the solution: $2(x - 1) \geq 6$

29. What is the perimeter of the figure when a = 14 in, b = 10 in, and c = 12 in? Fill in the blank.



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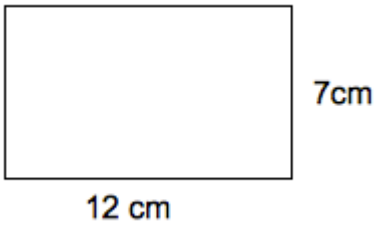
30. What is the area of the rectangle?



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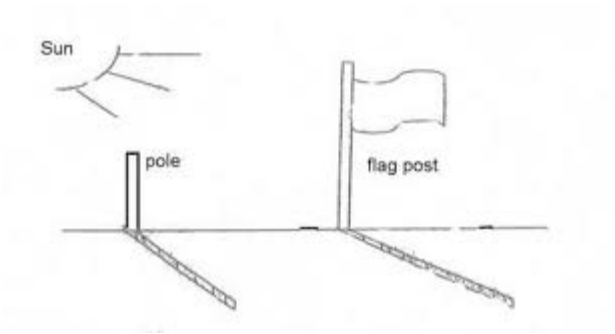
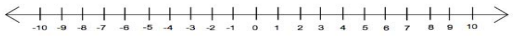
31. A 16 ft. flag post is perpendicular to the ground. For support, a wire is attached to the top of the pole. The other end of the wire is staked to the ground a distance of 12 feet from the base of the pole. What is the length of the wire in feet?



32. Solve. Then graph the solution $\frac{3x+9}{2} < 9$



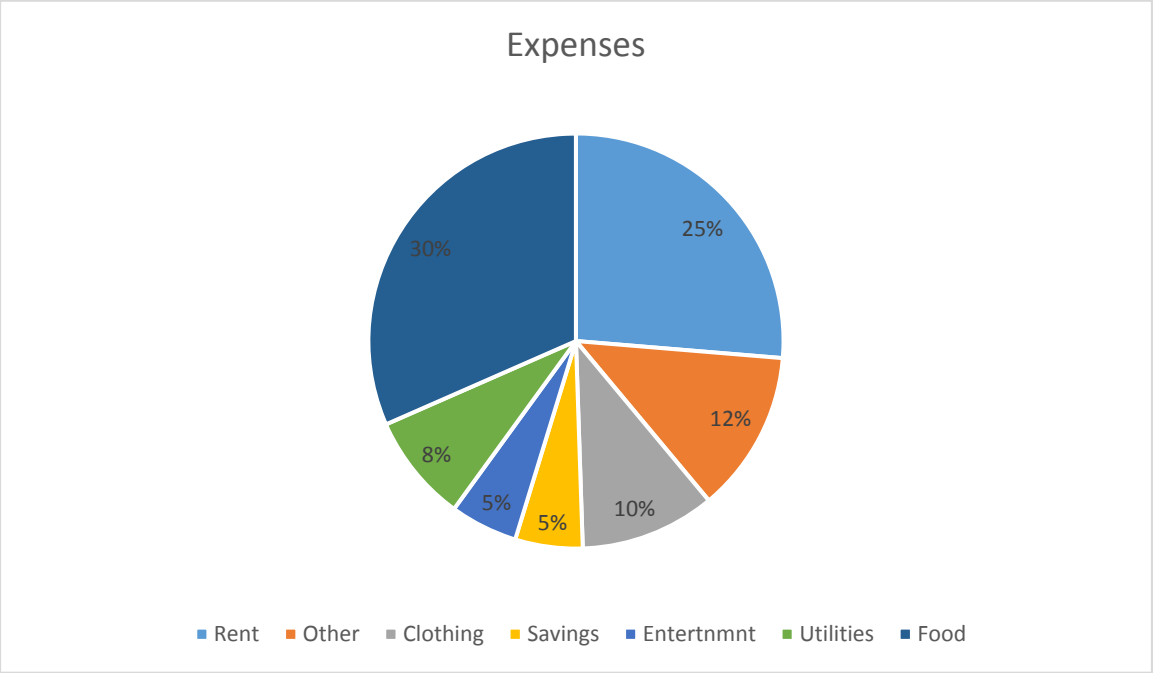
33. The fraction $\frac{7}{12}$ is $\left\{\begin{matrix} greater\ than \\ equal\ to \\ less\ than \end{matrix}\right\}$ the fraction $\frac{4}{9}$.

34. A plane leaves Albuquerque and travels at an average speed of 700 miles per hour. After 4 hours in flight, the plane will have traveled _____ miles.

35. A shop owner paid \$12.00 for a shirt. He marks it up to make an 80% profit. The price of the shirt is $\begin{Bmatrix} more\ than \\ exactly \\ less\ than \end{Bmatrix}$ \$12.70.

36. Five gallons of gas costs \$19. 48. The price of gas per gallon is _____

37. Flower estimated the percentages of her household expenses as shown in the following pie chart.



a. Her food budget is $\begin{Bmatrix} equal\ to \\ more\ than \\ less\ than \end{Bmatrix}$ what she pays for rent and utilities.

b. If she starts to take $\frac{2}{3}$ of the percentage set aside as other to pay off her student loan, her loan payment would be $\begin{Bmatrix} less\ than \\ equal\ to \\ more\ than \end{Bmatrix}$ what she budgets for utilities.