

PRACTICE TEST

# Mathematics

## Grade 5

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Student Name

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School Name

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District Name



# Grade 5 Mathematics

## SESSION 1

This session contains 6 questions.

*You may use your reference sheet during this session.  
You may **not** use a calculator during this session.*



### Directions

Read each question carefully and then answer it as well as you can. You must record all answers in this Practice Test Booklet.

For some questions, you will mark your answers by filling in the circles in your Practice Test Booklet. Make sure you darken the circles completely. Do not make any marks outside of the circles. If you need to change an answer, be sure to erase your first answer completely.

For other questions, you will need to fill in an answer grid. Directions for completing questions with answer grids are provided on the next page.

If a question asks you to show or explain your work, you must do so to receive full credit. Write your response in the space provided. Only responses written within the provided space will be scored.

**Directions for Completing Questions with Answer Grids**

1. Work the question and find an answer.
2. Enter your answer in the answer boxes at the top of the answer grid.
3. Print only one number or symbol in each box. Do not leave a blank box in the middle of an answer.
4. Under each answer box, fill in the circle that matches the number or symbol you wrote above. Make a solid mark that completely fills the circle.
5. Do not fill in a circle under an unused answer box.
6. If you need to change an answer, be sure to erase your first answer completely.
7. See below for examples of how to correctly complete an answer grid.

**EXAMPLES**

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6	8	1	9		
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- 1 Which of the following represents this number written in expanded form?

*four hundred sixteen and eighty-two hundredths*

- (A)  $4 \times 100 + 1 \times 10 + 6 \times 1 + 8 \times \frac{1}{10} + 2 \times \frac{1}{100}$
- (B)  $4 \times 100 + 1 \times 10 + 6 \times 1 + 80 \times \frac{1}{10} + 2 \times \frac{1}{100}$
- (C)  $400 \times 100 + 10 \times 10 + 6 \times 1 + 8 \times \frac{1}{10} + 2 \times \frac{1}{100}$
- (D)  $400 \times 100 + 10 \times 10 + 6 \times 1 + 80 \times \frac{1}{10} + 2 \times \frac{1}{100}$

- 2 What is the value of this expression?

$$\frac{3}{10} - \frac{1}{4} + \frac{4}{5}$$

- (A)  $\frac{9}{10}$
- (B)  $\frac{6}{11}$
- (C)  $\frac{6}{20}$
- (D)  $\frac{17}{20}$

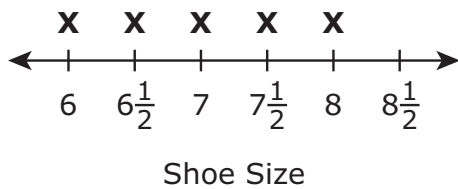
- 3 This list shows the shoe sizes of eight students in a fifth-grade class.

**Student's Shoe Sizes**

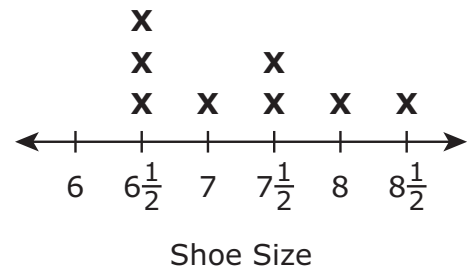
Name	Shoe Size
Becca	7
Cara	$6\frac{1}{2}$
Dean	$6\frac{1}{2}$
Kareem	$7\frac{1}{2}$
Leah	6
Luke	8
Suzanne	$6\frac{1}{2}$
Wally	$7\frac{1}{2}$

Which of the following line plots correctly represents the shoe sizes of the students?

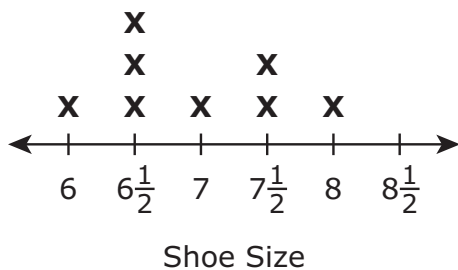
(A) **Student's Shoe Sizes**



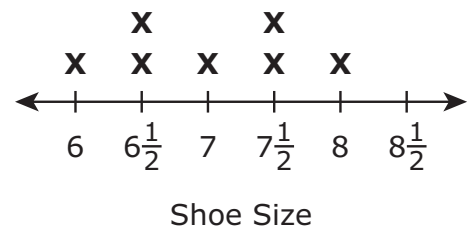
(B) **Student's Shoe Sizes**



(C) **Student's Shoe Sizes**



(D) **Student's Shoe Sizes**

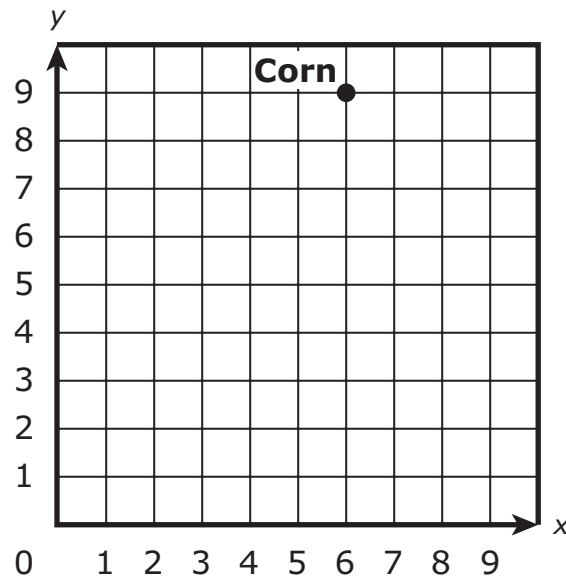


This question has two parts.

- 4 A gardener planted asparagus, beans, and corn in a garden. The gardener will use a coordinate plane to show where in the garden each crop was planted.

**Part A**

The location of the corn is shown on this coordinate plane.



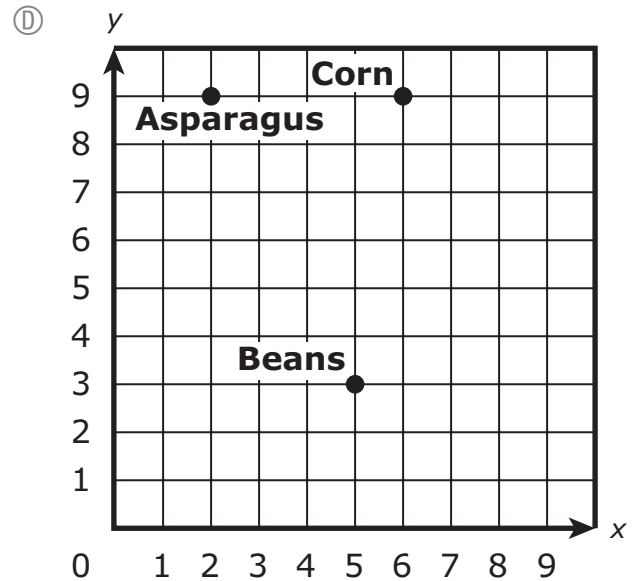
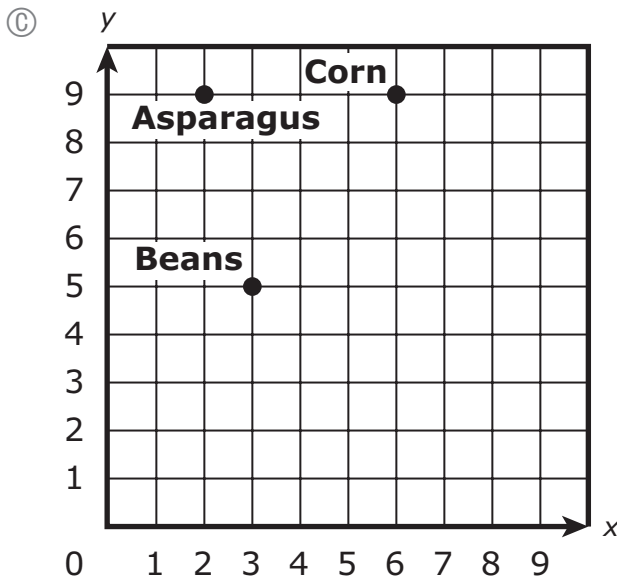
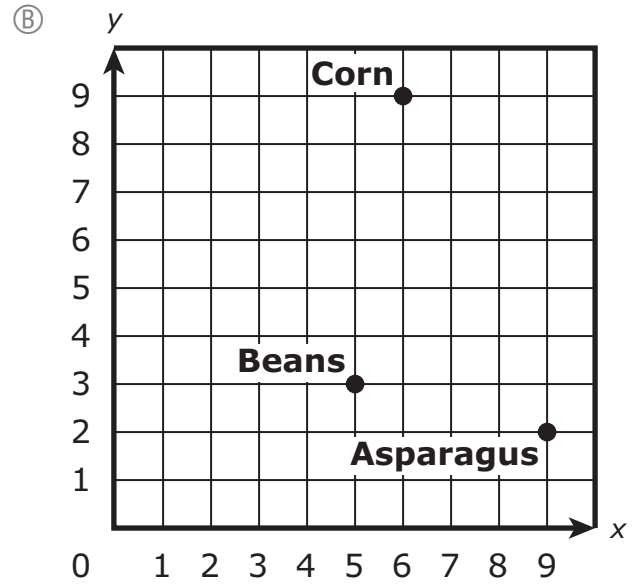
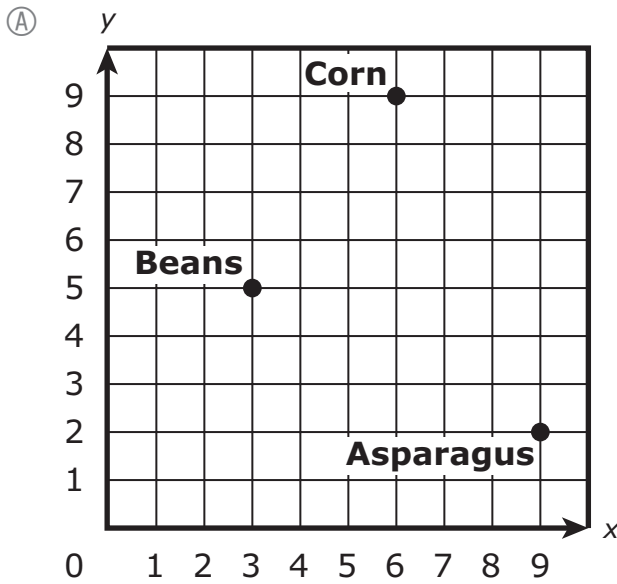
Which of the following ordered pairs represents the location of the corn?

- Ⓐ (9, 5)
- Ⓑ (9, 6)
- Ⓒ (5, 9)
- Ⓓ (6, 9)

**Part B**

The location of the asparagus is (9, 2). The location of the beans is (3, 5).

Which coordinate plane represents the locations of the asparagus and the beans?



- 5 Which of the following expressions have a product that is greater than  $\frac{2}{5}$ ?

Select the **two** correct answers.

(A)  $\frac{2}{5} \times \frac{3}{2}$

(B)  $\frac{2}{5} \times \frac{1}{3}$

(C)  $\frac{2}{5} \times \frac{3}{4}$

(D)  $\frac{2}{5} \times \frac{6}{6}$

(E)  $\frac{2}{5} \times \frac{4}{1}$

- 6 A farmer has 20 bins of apples. Each bin has 25 red apples and 30 green apples.

Which of the following expressions can be used to find the total number of apples in all the bins?

(A)  $20 + (25 \times 30)$

(B)  $20 \times (25 + 30)$

(C)  $(20 + 25) \times (20 + 30)$

(D)  $(20 \times 25) \times (20 \times 30)$



# Grade 5 Mathematics

## SESSION 2

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7 Which of the following statements are true?

Select the **three** correct answers.

- Ⓐ The product of  $6 \times \frac{5}{3}$  will be greater than 6 because the fraction  $\frac{5}{3}$  is greater than 1.
- Ⓑ The product of  $6 \times \frac{5}{3}$  will be less than 6 because the fraction  $\frac{5}{3}$  is less than 1.
- Ⓒ The product of  $7 \times \frac{6}{6}$  will be greater than 7 because the fraction  $\frac{6}{6}$  is greater than 1.
- Ⓓ The product of  $7 \times \frac{6}{6}$  will be equal to 7 because the fraction  $\frac{6}{6}$  is equal to 1.
- Ⓔ The product of  $3 \times \frac{2}{3}$  will be less than 3 because the fraction  $\frac{2}{3}$  is less than 1.
- Ⓕ The product of  $3 \times \frac{2}{3}$  will be equal to 3 because the fraction  $\frac{2}{3}$  is equal to 1.

- 8 A package is in the shape of a right rectangular prism.
- The base of the package has an area of 15 square inches.
  - The height of the package is 12 inches.

What is the volume, in cubic inches, of the package?

Enter your answer in the answer boxes at the top of the answer grid **and** completely fill the matching circles.

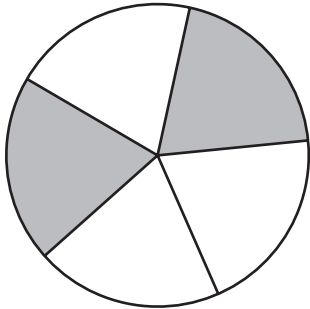
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3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
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9	9	9	9	9	9



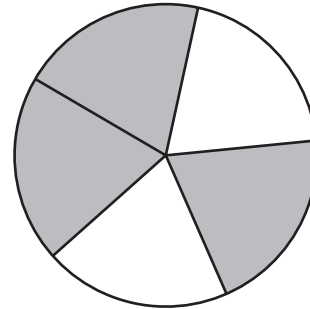
- 9 In which of the following models does the shaded part show the product of this expression?

$$\frac{2}{3} \times \frac{1}{2}$$

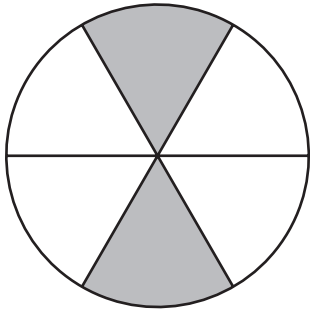
(A)



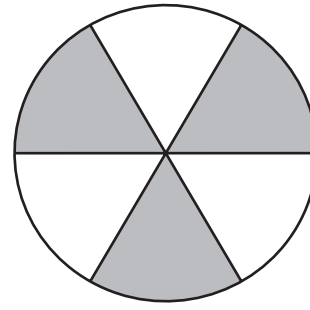
(B)



(C)



(D)



- 10 A student wants to round this number.

89.473

Which of these statements about rounding the number are correct?

Select the **three** correct answers.

- Ⓐ The number 89.473 rounded to the nearest one is 89.
- Ⓑ The number 89.473 rounded to the nearest one is 90.
- Ⓒ The number 89.473 rounded to the nearest tenth is 89.47.
- Ⓓ The number 89.473 rounded to the nearest tenth is 89.5.
- Ⓔ The number 89.473 rounded to the nearest hundredth is 89.46.
- Ⓕ The number 89.473 rounded to the nearest hundredth is 89.47.

11 Which of the following conversions are correct?

Select the **two** correct answers.

- Ⓐ  $2 \text{ g} = 2,000 \text{ mg}$
- Ⓑ  $2 \text{ g} = 0.02 \text{ kg}$
- Ⓒ  $0.002 \text{ mg} = 2 \text{ g}$
- Ⓓ  $20 \text{ mg} = 2,000 \text{ g}$
- Ⓔ  $20 \text{ kg} = 20,000 \text{ g}$

**This question has three parts. Be sure to label each part of your response.**

- 12** Terry is making meatballs for a family dinner. He needs ground turkey and ground beef to make the meatballs.

Ground turkey costs \$4.50 per pound. Terry buys 2.6 pounds of ground turkey.

- A. What is the total cost, in dollars, for 2.6 pounds of ground turkey? Show or explain how you got your answer.

Terry needs 5.5 pounds of ground beef to make the meatballs. He has 2.75 pounds of ground beef at home.

- B. What is the total number of pounds of ground beef that Terry needs to buy? Show or explain how you got your answer.

Terry has a total of 8.1 pounds of meat to make meatballs. He will use 0.3 pound of meat to make each meatball.

- C. What is the total number of 0.3-pound meatballs Terry can make with 8.1 pounds of meat? Show or explain how you got your answer.



