

TEST NAME: **RP.2a**  
TEST ID: **355597**  
GRADE: **07**  
SUBJECT: **Mathematics**  
TEST CATEGORY: **School Assessment**

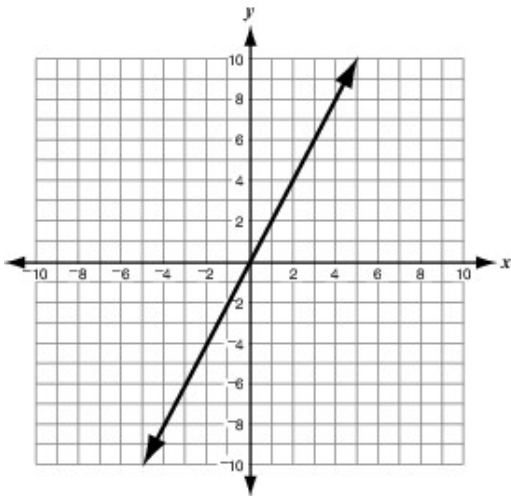
Student: \_\_\_\_\_

Class: \_\_\_\_\_

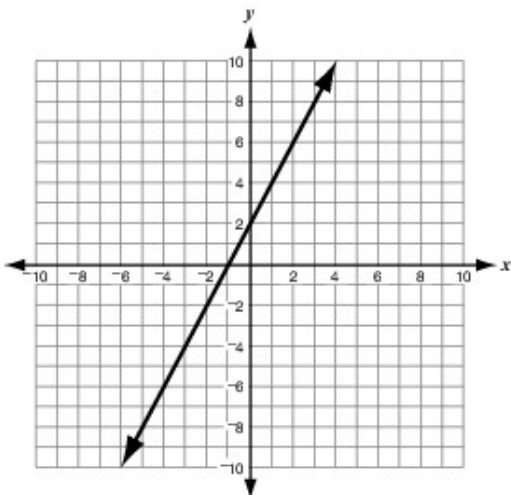
Date: \_\_\_\_\_

1. Which graph shows a proportional relationship between  $x$  and  $y$ ?

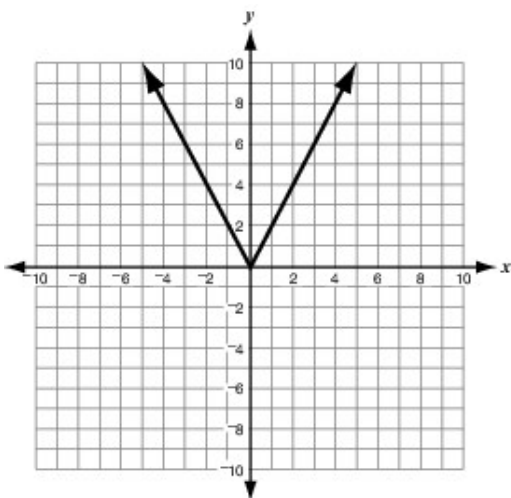
A.



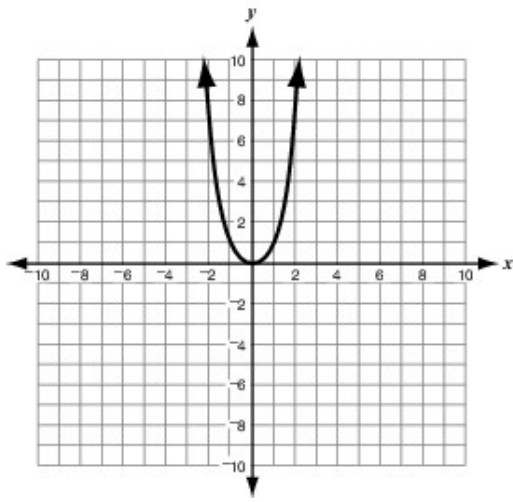
B.



C.



D.



2. Which table shows a proportional relationship between the distances on a map and the actual distances?

A.

Distance on the Map (in inches)	Actual Distance (in miles)
1	4
2	8
3	9
4	16

B.

Distance on the Map (in inches)	Actual Distance (in miles)
1	4
2	8
5	20
6	24

C.

Distance on the Map (in inches)	Actual Distance (in miles)
1	3
3	9
4	16
7	21

D.

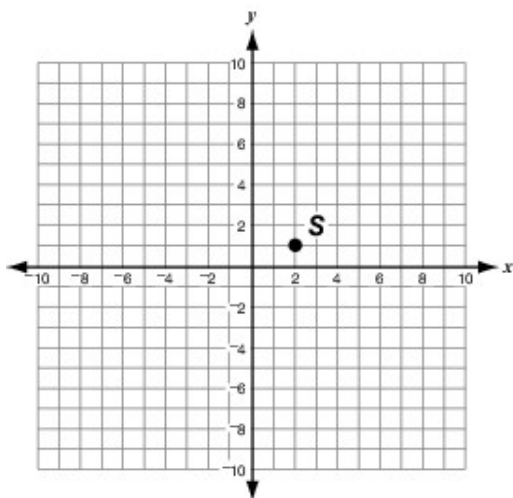
Distance on the Map (in inches)	Actual Distance (in miles)
1	3
2	6
5	15
6	30

3. The table of values below represents a proportional relationship.

$x$	$y$
2	7
4	14
—	35

What is the value of the missing number?

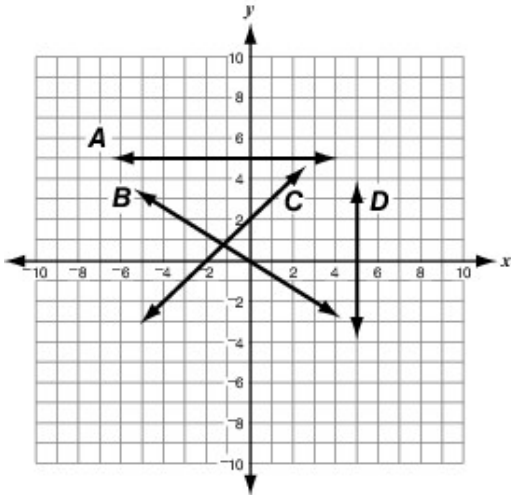
- A. 8
  - B. 10
  - C. 14
  - D. 122.5
4. Look at point  $S$  in the coordinate grid below.



If a line contains both point  $S$  and the origin, which point would the line also contain?

- A. (12, 8)
- B. (14, 7)
- C. (15, 9)
- D. (20, 12)

5. Look at the lines in the grid below.



Which line represents a proportional relationship?

- A. line A
  - B. line B
  - C. line C
  - D. line D
6. A farmer wants to determine how many pounds of fruit he can pick per minute. He finds that he can pick 6 pounds of fruit in 4 minutes, so he plots the point  $(4, 6)$  on a graph. If the farmer uses this point to make a line showing the relationship between the number of minutes he spends picking fruit and the number of pounds of fruit he picks, which of these points will also be on that line?
- A.  $(3, 2)$
  - B.  $(5, 10)$
  - C.  $(6, 9)$
  - D.  $(7, 9)$

7. Which two quantities form a proportional relationship?

A.  $\frac{1}{4}$  and  $\frac{3}{8}$

B.  $\frac{2}{15}$  and  $\frac{3}{30}$

C.  $\frac{5}{6}$  and  $\frac{5}{24}$

D.  $\frac{10}{18}$  and  $\frac{45}{81}$

8. Dante bought 15 pounds of metal for \$36. Which purchase would have the same cost per pound as Dante's purchase?

A. 5 pounds of metal for \$12

B. 6 pounds of metal for \$15

C. 8 pounds of metal for \$18

D. 9 pounds of metal for \$21

9. A library charges a fine of 5 cents per day for each book that is returned late. Reggie created a table to display this proportion, but one fine in his table is incorrect.

### Library Fines

Number of Days a Book is Returned Late	Fine (in cents)
3	15
6	30
11	45
12	60

Which fine in the chart is incorrect based on the proportion the library uses?

- A. 15 cents for 3 days late, since  $\frac{15}{3} \neq \frac{1}{5}$
- B. 30 cents for 6 days late, since  $\frac{1}{6} \neq \frac{30}{5}$
- C. 45 cents for 11 days late, since  $\frac{11}{45} \neq \frac{1}{5}$
- D. 60 cents for 12 days late, since  $\frac{60}{5} \neq \frac{1}{12}$
10. Which set of ordered pairs represents a proportional relationship between the x and y values?
- A. (0, 0), (1, 2), (2, 4)
- B. (0, 0), (1, 2), (3, 4)
- C. (0, 0), (1, 2), (2, 1)
- D. (0, 0), (1, 2), (3, 9)