

TEST NAME: **EOG Review #1**
TEST ID: **564205**
GRADE: **08**
SUBJECT: **Mathematics**
TEST CATEGORY: **School Assessment**

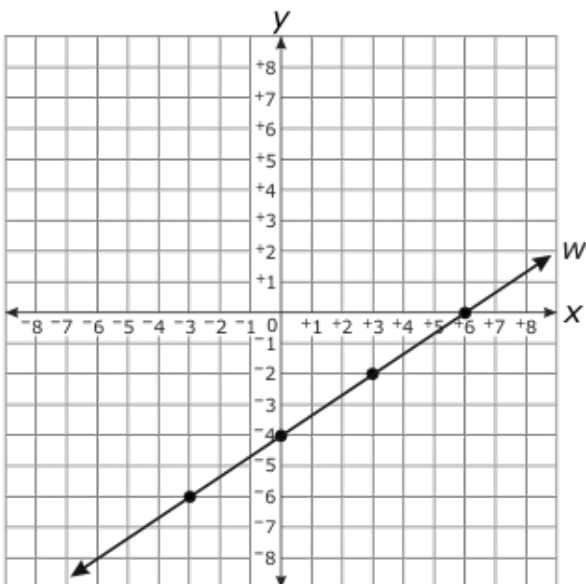
05/08/15, EOG Review #1

Student: _____

Class: _____

Date: _____

1. Line w is graphed below. Line z will be graphed below. Line z goes through the points $(2, 1)$ and $(4, -5)$.

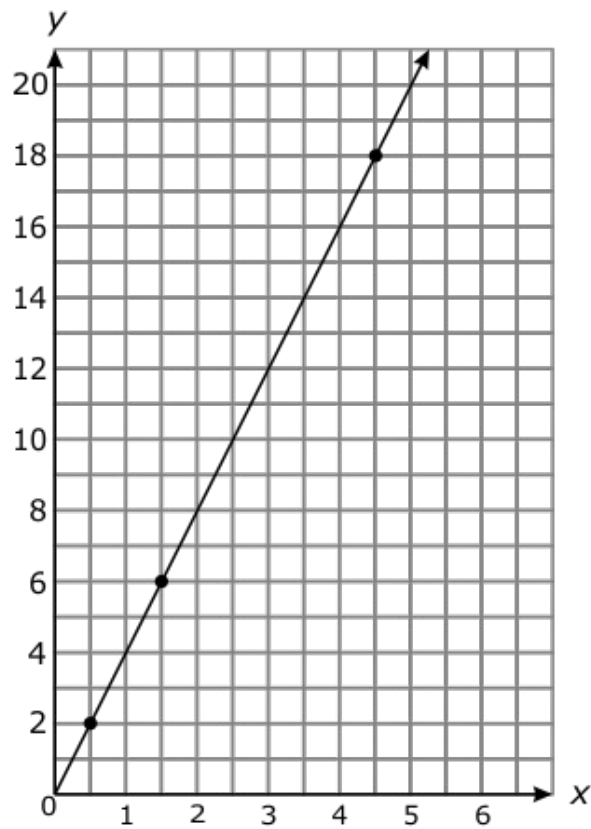


What is the point of intersection of lines w and z ?

- A. $(6, 0)$
 - B. $(3, -2)$
 - C. $(0, -4)$
2. Which numerical expression is equivalent to $2^{-2} \times 2^{-3}$?

- A. $\frac{1}{64}$
- B. $\frac{1}{32}$
- C. 32
- D. 64

3. A line is graphed below.



What is the slope of the line?

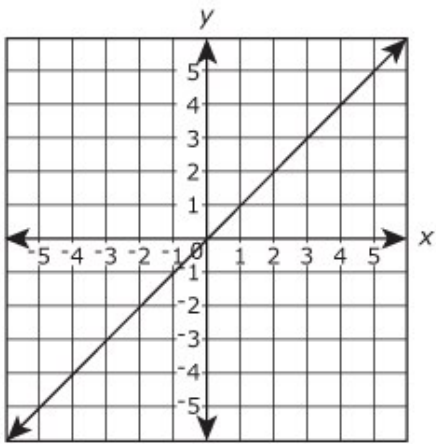
- A. 0
- B. 1
- C. 2
- D. 4

4. Which equation has no solution?

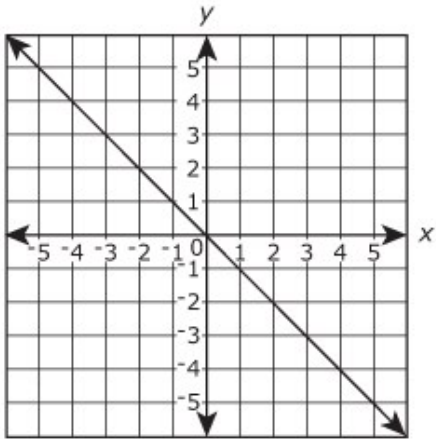
- A. $4x - 9 = -9$
- B. $3x + 2 = 17$
- C. $2x + 4 = 2x + 6$
- D. $x + 3x = 8x - 4x$

5. Which graph shows a nonlinear function that is decreasing when $x > 0$?

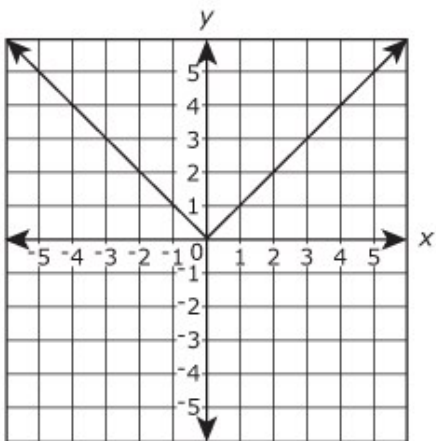
A.



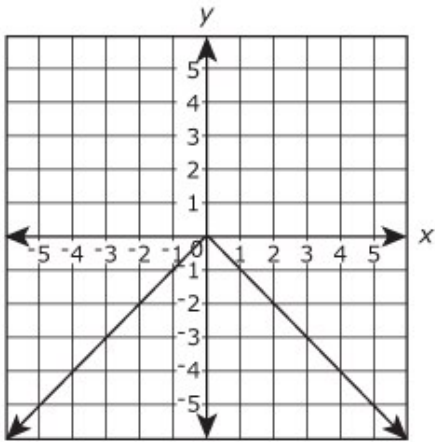
B.



C.



D.

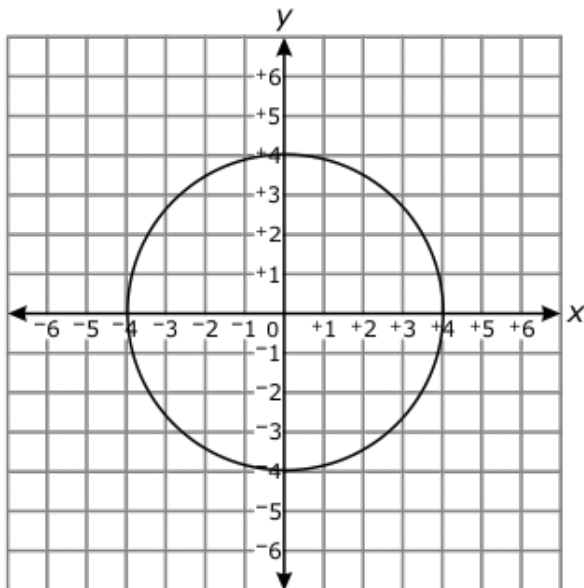


6. Paula runs a bakery. She estimates that her weekly cost of rent and electricity is \$250. The ingredients to bake one cake cost \$4. Which equation represents the total cost to Paula's bakery per week, y , if x number of cakes are made?

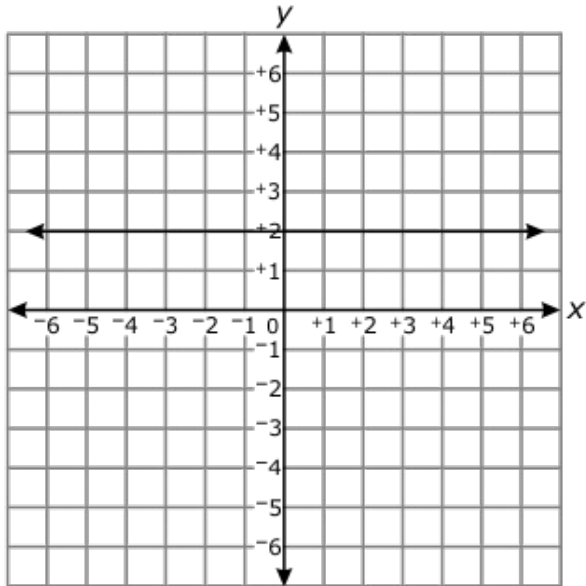
- A. $y = 250x + 4$
- B. $y = 4x + 250$
- C. $y = 250x - 4$
- D. $y = 4x - 250$

7. Which graph displays a linear function?

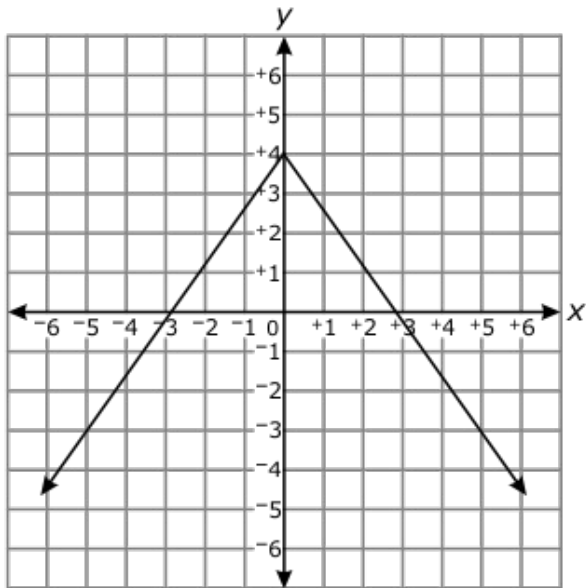
A.



B.



C.



8. A boat starts in Riverton and sails 5 miles North. Then, the boat sails East another 3 miles, forming a right angle. What is the **approximate** shortest distance back to Riverton?
- A. 2 miles
 - B. 4 miles
 - C. 6 miles
 - D. 8 miles

9. Square $PQRS$ has the vertices $P(-3, 3)$, $Q(3, 3)$, $R(3, -3)$, and $S(-3, -3)$. What is the **approximate** length of diagonal QS ?
- A. 6.0 units
 - B. 8.5 units
 - C. 10.5 units
 - D. 12.0 units
10. What is the **approximate** distance between the points $(-1, 2)$ and $(7, 6)$?
- A. 8 units
 - B. 9 units
 - C. 12 units