TEST NAME: **online No 3 Math 8 12-05**
TEST ID: **2723647**
GRADE: **08 - Eighth Grade**
SUBJECT: **Mathematics**
TEST CATEGORY: **My Classroom**

Student: _____

Class: _____

Date: _____

1. **Which statement regarding the number of solutions for the linear equation shown below is true?**

$$4(3x + 8) - 9 = 2(6x - 8) + 39$$

A. There are infinitely many solutions.

B. There are exactly two solutions.

C. There is exactly one solution.

D. There is no solution.

2. Three times the difference of a number *x* and seven is twenty-three minus the sum of three times a number *x* and two. What is the value of *x*?

A. 5

B. 7

C. no solution

D. infinitely many solutions

3. What value of *x* satisfies the equation $\frac{-4x - 2}{3} = -6$?

A. -16

B. -12

C. 0

D. 4

4. What is the solution to the equation $2(2x - 5) = 6$?

A. 3

B. 4

C. 8

5. What is the solution to the equation $\frac{1}{2}(x+5)=10$?

A. $x = 0$

B. $x = 10$

C. $x = 15$

D. $x = 25$

6. What is the value of x in the equation $6(x + 5) = 3(x - 14)$?

A. $^{-}1$

B. $^{-}4$

C. $^{-}6$

D. $^{-}24$

7. What is the solution to the equation $8 - 7(4x - 2) = {}^{-}28x + 6$?

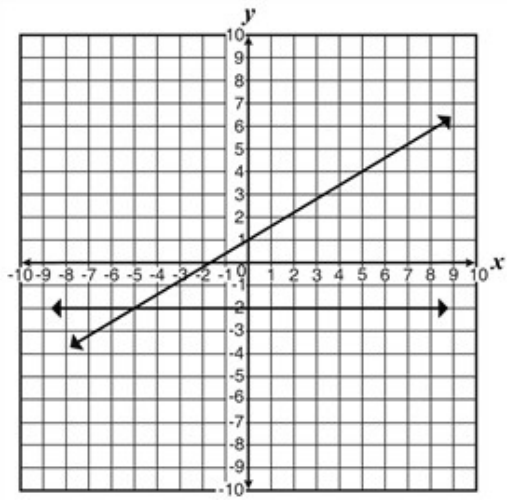
A. 6

B. 12

C. no solution

D. all real numbers

8. **The graphs $y = \frac{3}{5}x + 1$ and $y = -2$ are shown in the coordinate plane below.**



Which coordinate point satisfies both equations?

A. $(-5, -2)$

B. $(-2, -5)$

C. $(-2, -2)$

D. $(0, -2)$

9. Kathy has $2 less than 3 times the amount of money Jason has. Together, they have $34. How much money does Kathy have?

A. $8

B. $9

C. $25

D. $26

10. 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?

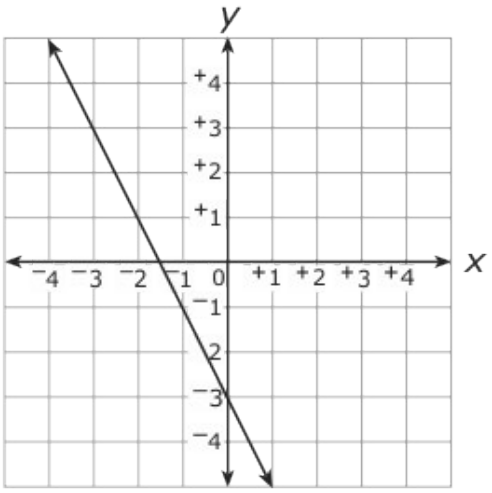
A. $y = 250x + 4$

B. $y = 4x + 250$

C. $y = 250x - 4$

D. $y = 4x - 250$

11. Which is an equation of the line graphed below?



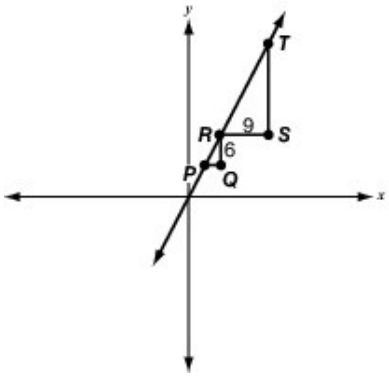
A. $y = 2x - 3$

B. $y = \frac{1}{2}x - 3$

C. $y = {}^{-}\frac{1}{2}x - 3$

D. $y = {}^{-}2x - 3$

12. On the coordinate plane below, triangle *PQR* is similar to triangle *RST*. The corresponding side lengths of triangle *RST* and triangle *PQR* are in the ratio of 3:1.



What is the equation of the line containing the points *P* and *T*?

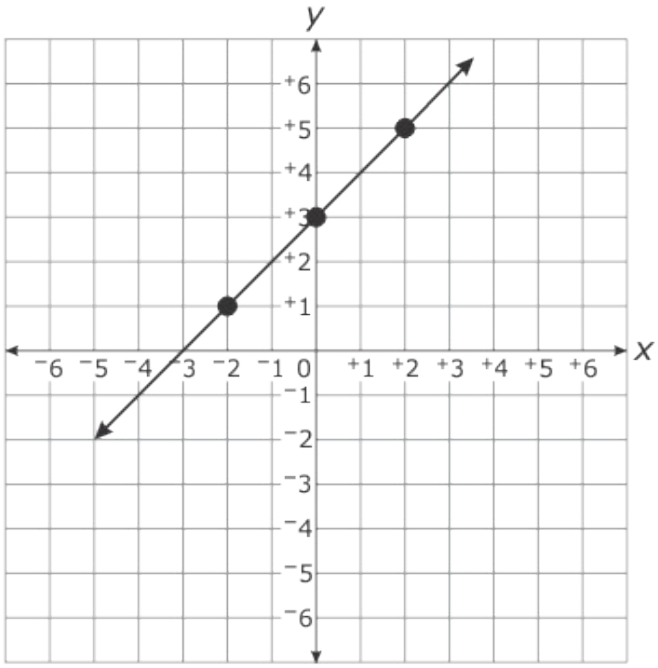
A. $y = \frac{2}{3}x$

B. $y = \frac{3}{2}x$

C. $y = 2x$

D. $y = 3x$

13. Which is an equation of the line graphed below?

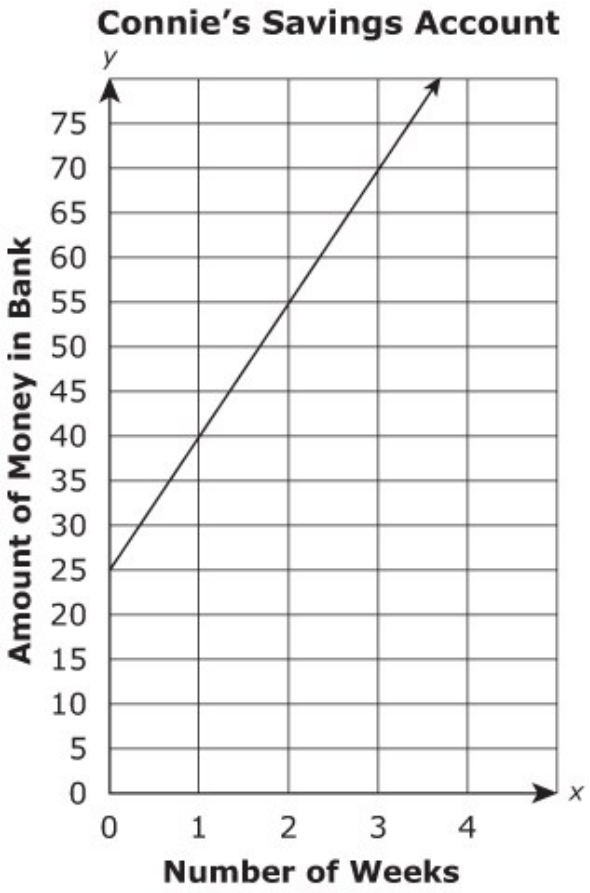


A. $y = {}^{-}3x + 3$

B. $y = x + 3$

C. $y = 3x - 3$

14. Use the graph below to answer the question.



Which statement is true about Connie's savings account?

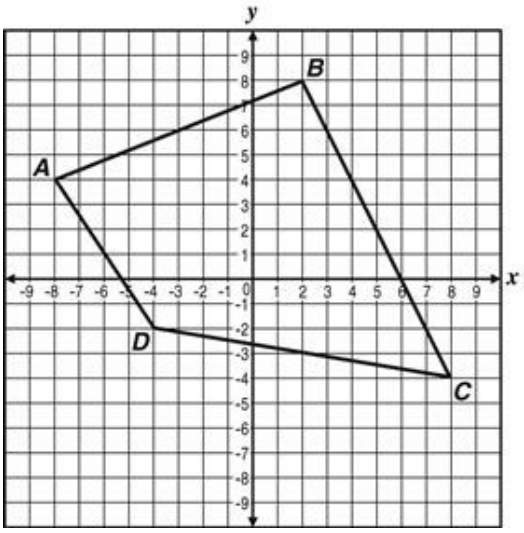
A. Connie started with $25 in her savings account and saved $40 each week.

B. Connie started with $25 in her savings account and saved $15 each week.

C. Connie started with $15 in her savings account and saved $25 each week.

D. Connie started with $0 in her savings account and saved $25 each week.

15. **Quadrilateral $ABCD$ is shown on this grid.**



If Quadrilateral $ABCD$ is dilated about the origin using a scale factor of $\frac{1}{2}$ to make Quadrilateral $A'B'C'D'$, what will be the coordinates of A', B', C', and D'?

A. $A'(-4, 2), B'(1, 4), C'(4, -2), D'(-2, -1)$

B. $A'(-8, 4), B'(2, 8), C'(8, -4), D'(-4, -2)$

C. $A'(-10, 2), B'(0, 6), C'(6, -6), D'(-6, -4)$

D. $A'(-16, 8), B'(4, 16), C'(16, -8), D'(-8, -4)$