

# PERT PRACTICE TEST #2

**DO NOT** USE A CALCULATOR WHILE WORKING ON THIS PRACTICE TEST. CALCULATORS ARE ONLY ALLOWED ON VERY FEW PROBLEMS ON THE MATH SECTION OF THE ACTUAL PERT PLACEMENT TEST.

## MA.912.A.1.1

1. Evaluate the expression when  $x = 4$  and  $y = 3$ .

$$2[(x - 1) + 2xy]$$

- A) 31                      C) 42  
B) 40                      D) 54

## MA.912.A.7.2

2. Solve.

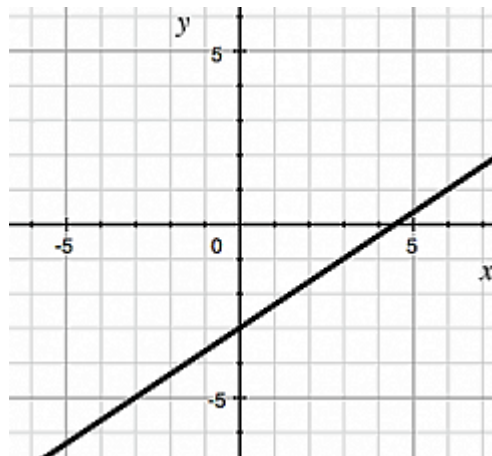
$$x^2 - 49 = 0$$

- A)  $\pm 49$                 C)  $\pm 7$   
B)  $\pm 12$                 D)  $\pm 6$

## MA.912.A.3.9

3. Write an equation for the line graphed.

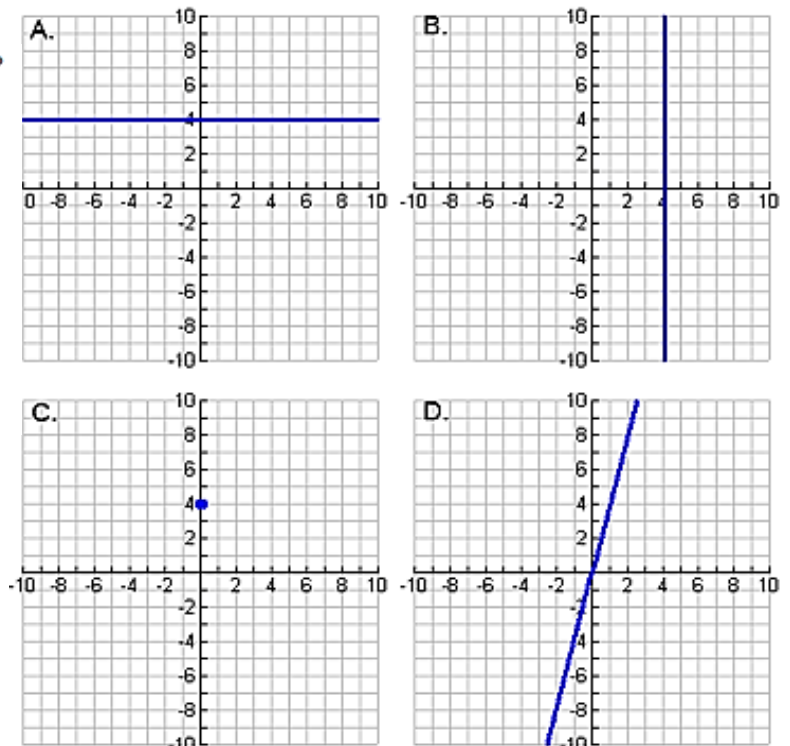
- A)  $y = \frac{2}{3}x - 3$   
B)  $y = \frac{2}{3}x + 3$   
C)  $y = \frac{3}{2}x - 3$   
D)  $y = \frac{3}{2}x + 3$



## MA.912.A.3.9

4. Which graph represents the function  $y = 4$ ?

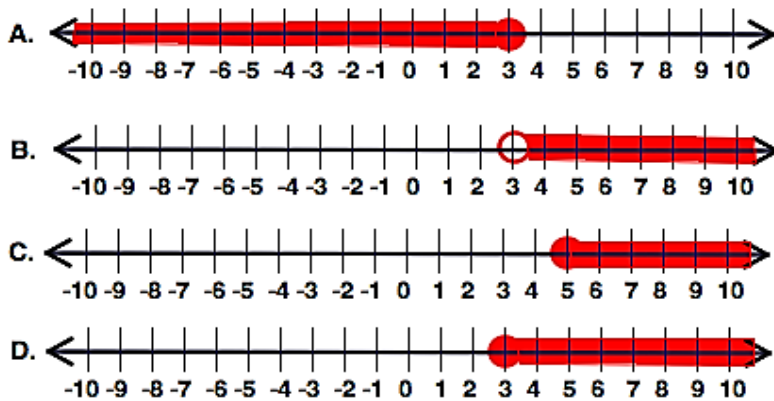
- A) A  
B) B  
C) C  
D) D



**MA.912.A.3.4**

5. Which graph shows the solution to the inequality?

$$x - 4 \leq -1$$

**MA.912.A.4.1**

6. Simplify.

$$(a^3b^4c^5)(ab^3c)$$

- A)  $a^2bc^5$       C)  $a^3bc^7$   
 B)  $a^3bc^5$       D)  $a^4b^7c^6$

**MA.912.A.4.4**

7. Which expression is equivalent to  $\frac{9x^2 - 12x + 18}{3x}$ ?

- A)  $3x - 4 + \frac{6}{x}$       C)  $\frac{3x^2 - 4}{3x}$   
 B)  $3x^2 - 4 + 6x$       D)  $3x - 4 + \frac{x}{6}$

**MA.912.A.3.1**

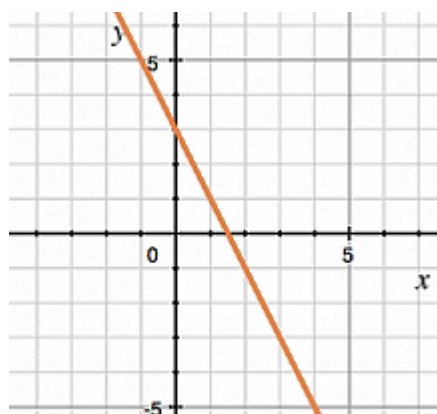
8. Given  $2x - y = 6$ , solve for  $y$ .

- A)  $y = 2x + 6$   
 B)  $y = 2x - 6$   
 C)  $y = -2x + 6$   
 D)  $y = -2x - 6$

**MA.912.A.3.9**

9. Identify the equation of the graph shown.

- A)  $y = 2x + 3$   
 B)  $y = 2x - 3$   
 C)  $y = -2x + 3$   
 D)  $y = -2x - 3$



**MA.912.A.1.1**

10. Jimmy loaded three bags of sand into his wheelbarrow. The bags weighed  $24\frac{1}{2}$  lbs,  $32\frac{3}{5}$  lbs, and  $44\frac{1}{8}$  lbs. The total amount of sand in the wheelbarrow is

- A)  $100\frac{1}{3}$  lbs.  
 B)  $100\frac{9}{40}$  lbs.  
 C)  $101\frac{1}{3}$  lbs.  
 D)  $101\frac{9}{40}$  lbs.

**MA.912.A.4.2**

11. Multiply and simplify.

$$(x - 4)^2$$

- A)  $x^2 - 8x - 16$       C)  $x^2 - 16$   
 B)  $x^2 - 8x + 16$       D)  $x^2 - 8$

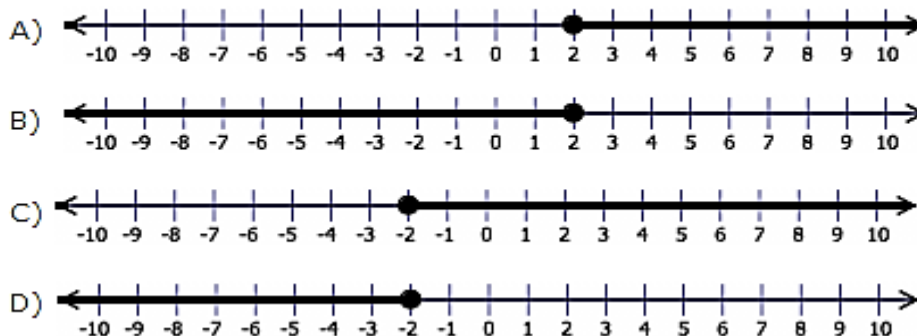
**MA.912.A.4.2**

12. Simplify the expression:  $(x + 3)(2x - 1)$

- A)  $7x^2 - 3$       C)  $2x^2 - 5x - 3$   
 B)  $2x^2 - 7x - 3$       D)  $2x^2 + 5x - 3$

**MA.912.A.3.4**

13. Solve  $-4x \geq -8$ . Graph the solution.

**MA.912.A.1.1**

14. Evaluate the expression if  $a = -2$  and  $b = 5$ .

$$(a^2 - b)^3$$

- A) -729      C) -1  
 B) -27      D) 1

**MA.912.A.4.2**

15. Subtract.

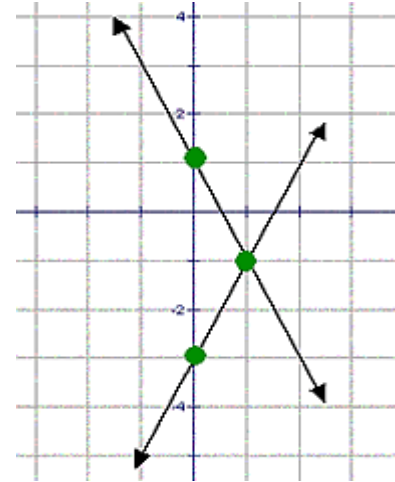
$$(3u + 3) - (3u + 3)$$

- A) 0                      C) 6u  
 B) 6                      D) 6u + 6

**MA.912.A.3.13**

16. Identify the solution for the system of equations graphed here.

- A) (1, 1)                      C) (1, -1)  
 B) (-1, 1)                      D) (-1, -1)

**MA.912.A.3.3**17. Given  $F = \frac{9}{5}C + 32$ , the conversion formula for Fahrenheit to Celsius, solve for C.

- A)  $C = \frac{5}{9}(F - 32)$                       C)  $C = \frac{9}{5} \cdot \frac{F}{32}$   
 B)  $C = \frac{9}{5}(F - 32)$                       D)  $C = \frac{5}{9} \cdot \frac{F}{32}$

**MA.912.A.1.1**18. Find  $65.5 \div 2.5$ 

- A) 0.262                      C) 26.2  
 B) 2.62                      D) 262

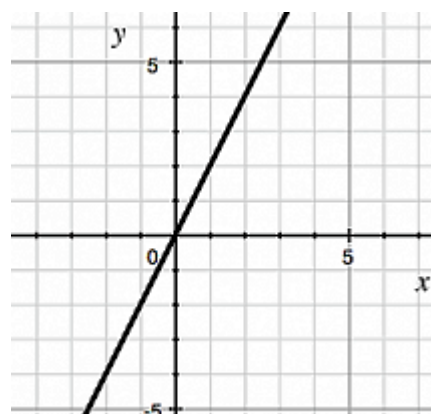
**MA.912.A.1.1**19. There are 5 people in an elevator. Together, they weigh 792.4 pounds. Find their average weight. (Average =  $\frac{\text{total}}{\text{number of people}}$ )

- A) 158.48 pounds                      C) 179.65 pounds  
 B) 162.23 pounds                      D) 184.57 pounds

**MA.912.A.3.9**

20. Write an equation for the line graphed.

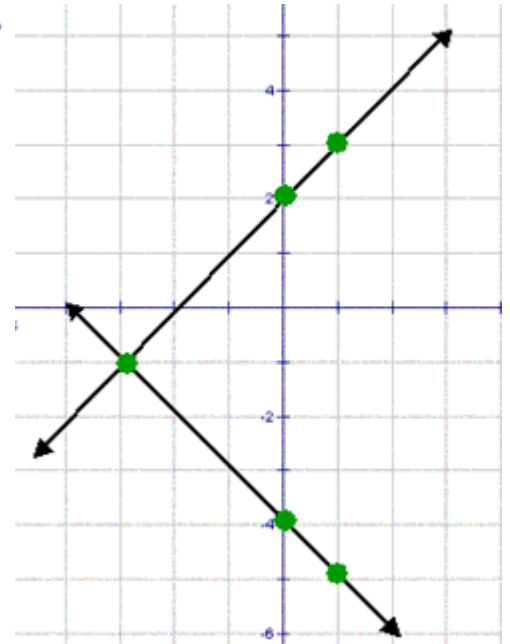
- A)  $y = 2$   
 B)  $y = 2x$   
 C)  $y = -2x$   
 D)  $y = 2x + 1$



**MA.912.A.3.9**

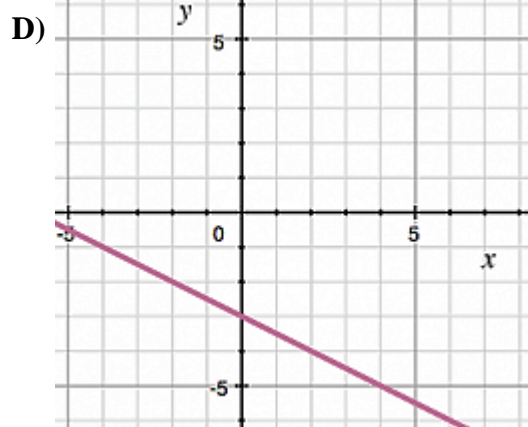
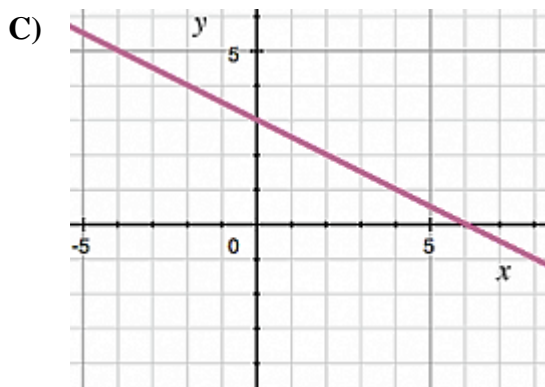
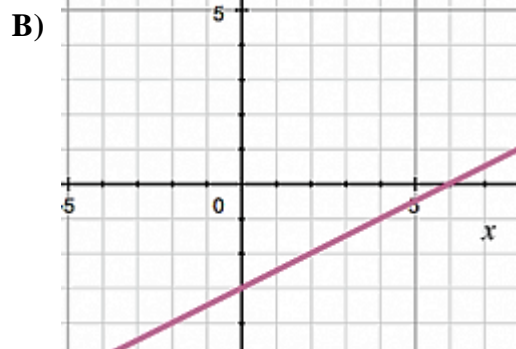
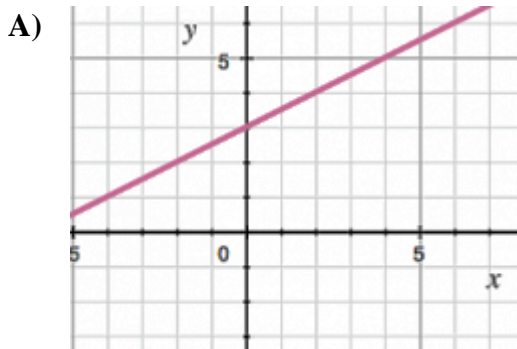
21. Which of the sets of equations represent the two lines graphed?

- A)  $y = x + 2$  and  $y = x - 4$
- B)  $y = x + 2$  and  $y = -x - 4$
- C)  $y = -x + 2$  and  $y = x - 4$
- D)  $y = -x + 2$  and  $y = -x - 4$



**MA.912.A.3.9**

22. Which graph represents the equation  $y = \frac{1}{2}x + 3$ ?



**MA.912.A.3.9**

23. Which equation is graphed here?

- A)  $y = 2 + \frac{2}{3}x$
- B)  $y = 2 - \frac{2}{3}x$
- C)  $y = -\frac{2}{3}x - 2$
- D)  $y = -\frac{2}{3}x + 2$

