

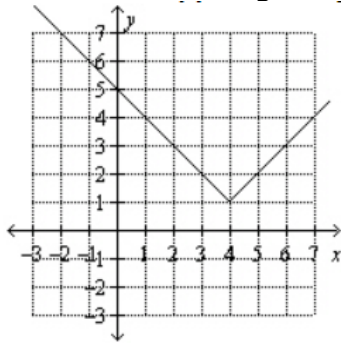
Algebra Review #29 SHOW HOW YOU SOLVED EACH PROBLEM

NAME _____

1. Consider the procedure used below to solve the given equation.
 Given: $-11(x+8) = 9$
 (1st step) $-11x - 88 = 9$
 (2nd step) $-11x = 97$
 (3rd step) $x = \frac{97}{-11}$

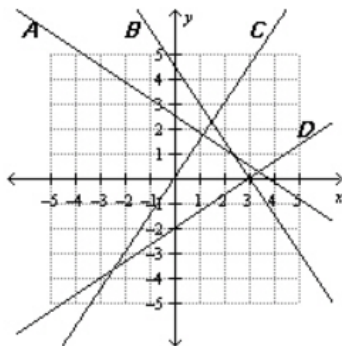
- Which of the following properties is a justification for the 1st step?
 a. Transitive property of equality
 b. Commutative property of addition
 c. Distributive property
 d. Associative property of addition

2. What is the range of the graph below?



- a. The set of all real numbers greater than or equal to 4.
 b. The set of all real numbers greater than or equal to 1.
 c. The set of all real numbers less than or equal to 1.
 d. The set of all real numbers.

3. Which line on the grid appears to have slope $\frac{2}{3}$?

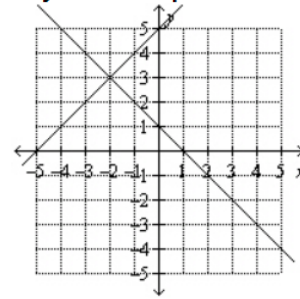


- a. A
 b. B
 c. C
 d. D

4. What is the solution to $4(2x - 3) = 2(3x + 1)$?

- a. -5
 b. 1
 c. 7
 d. 10

5. This is a graph of a system of equations

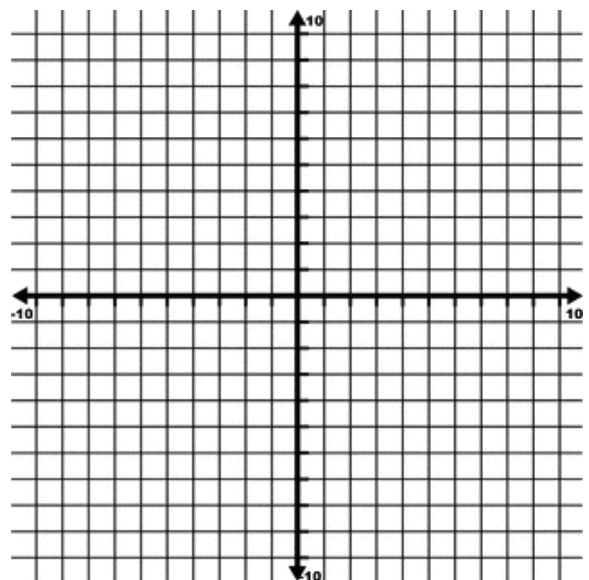


- Which is most likely the solution to the system of equations shown?

- a. (0, 5)
 b. (1, 0)
 c. (3, -2)
 d. (-2, 3)

6. Draw a graph of the equation $4y + 8 = 2x$

Slope: _____ Y-intercept: _____



7.

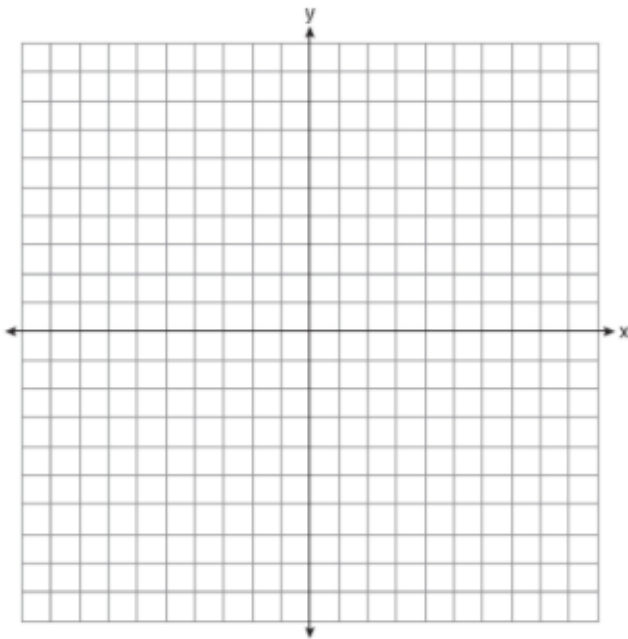
Which is the simplest radical form of $\sqrt{52}$?

- a. $13\sqrt{2}$
- b. $\sqrt{52}$
- c. $4\sqrt{13}$
- d. $2\sqrt{13}$

8. Graph the following system of inequalities:

$$-x + 3y < 6$$

$$4x + 3y \leq -9$$



Is (1,2) a solution to this system? YES or NO

Is (-4,0) a solution to this system? YES or NO

9.

Part A)

Simplify $(4^8)^2$.

- a. 4^{16}
- b. 32^2
- c. 4^6
- d. 4^{10}

Part B)

Divide. Write the quotient as a power.

$$\frac{8^8}{8^3}$$

- a. 40
- b. 8^5
- c. 8^{11}
- d. Cannot combine

Part C)

Simplify $m^3 \cdot y^6 \cdot m^2$.

- a. $m^5 y^6$
- b. $(m \cdot y)^{11}$
- c. my^6
- d. $m^6 y^6$

10. Solve for c:

$$-3x + 2c = -3$$