

Name: _____
8.EE.8b

Date: _____

____ 1. What is the solution to the system of equations below? (2014)

$$3x + 4y = -2$$

$$2x - 4y = -8$$

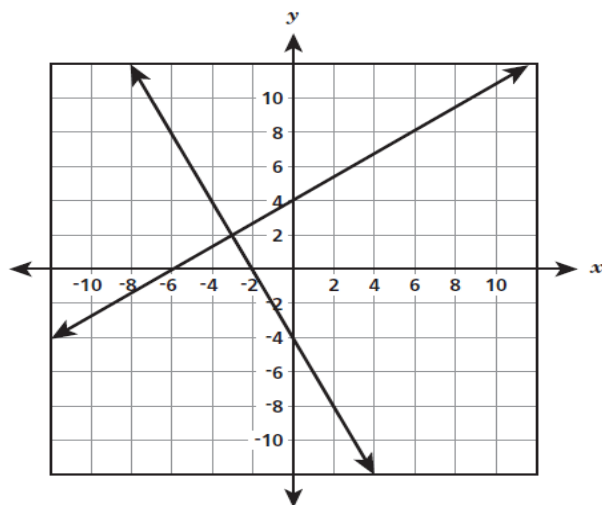
A. $x = 2, y = -2$

C. $x = 4, y = 4$

B. $x = 6, y = -5$

D. $x = -2, y = 1$

____ 2. The graph of a system of linear equations is shown below. (2015)



Which ordered pair is the **best** estimate for the solution of this system of linear equations?

A. $(-6, -2)$

B. $(-3, 2)$

C. $(4, -4)$

D. $(6, 8)$

____ 3. Solve the system of equations below. (2016)

$$2x + 4y = 10$$

$$2x + 4y = -10$$

A. $x = 3, y = 1$

C. No Solution

B. $x = 6, y = -4$

D. Infinitely many solutions

____4. A system of equations is shown below. (calculator allowed) (2015)

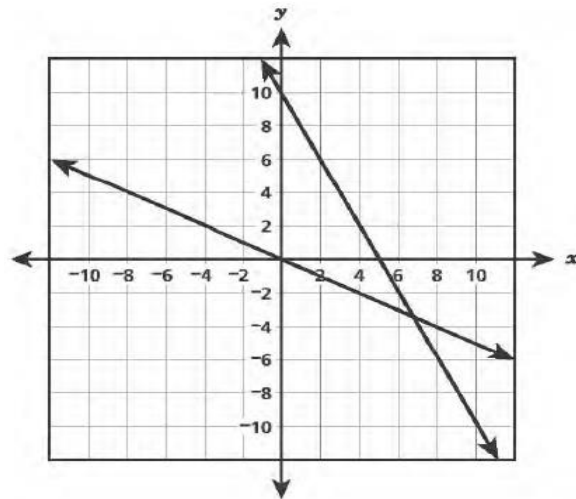
$$5x + 3y = -6$$

$$2x + y = -4$$

Which statement about the ordered pair $(-6, 8)$ is true?

- A. It is the only solution to the system.
- B. It is not a solution to either equation.
- C. It is one of many solutions to the system.
- D. It is a solution to the first but not the second equation

____5. The graph of a system of equations is shown below. (2016) (no calculator)



What system of equations represents the graph?

- | | | | |
|---------------------|---------------------|-----------------------------|-----------------------------|
| A. $y = -2x + 10$ | B. $y = -2x + 10$ | C. $y = -\frac{1}{2}x + 10$ | D. $y = -\frac{1}{3}x + 10$ |
| $y = -\frac{1}{3}x$ | $y = -\frac{1}{2}x$ | $y = -2x$ | $y = -2x$ |

____6. What is the solution to the system of equations below? (2017)

$$2x + 3y = 6$$

$$x - 3y = 9$$

- | | | | |
|-----------------------|---------------|------------------------|------------------------|
| A. $(1, \frac{8}{3})$ | B. $(-3, -4)$ | C. $(5, -\frac{4}{3})$ | D. $(8, -\frac{1}{3})$ |
|-----------------------|---------------|------------------------|------------------------|

_____7. A system of equations is shown below. (2018)

$$5x + 2y = -15$$

$$2x - 2y = -6$$

What is the solution to the system of equations?

A. $(-3, 0)$

B. $(0, -3)$

C. $(-3, 6)$

D. $(6, -3)$

_____8. Which system of equations has no solution? (2019 and 2021)

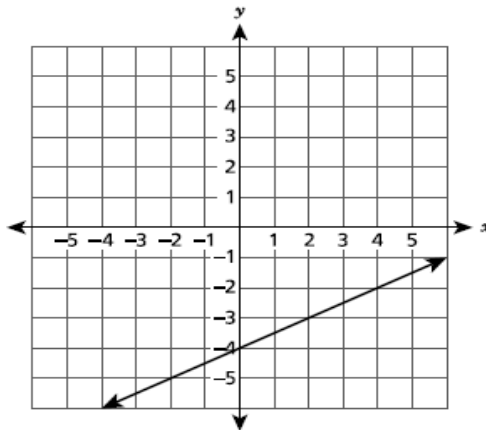
A. $3x + 4y = 5$
 $6x + 8y = 10$

B. $7x - 2y = 9$
 $7x - 2y = 13$

C. $2x - y = -11$
 $-2x + y = 11$

D. $3x + 6y = 1$
 $x + y = 0$

_____9. A line is graphed on the coordinate plane below. (2019 and 2021)



Line $y = -x + 2$ will be graphed on the same coordinate plane to create a system of equations. What is the solution to that system of equations?

A. $(-2, 4)$

B. $(0, -4)$

C. $(2, -4)$

D. $(4, -2)$

10. Determine the solution to the system of equations below.

(2015)

$$x - 3y = 1$$

$$3x - 5y = 11$$

Show your work.

Answer _____

11. Determine the solution, if any, to the system of equations below.

(2017)

$$8x - 2y = 1$$

$$-4x + y = 3$$

Show your work.

Answer _____

12. Solve the system of equations shown below

(2019)

$$2x - 6y = -12$$

$$x + 2y = 14$$

Show your work.

Answer _____