

Name: _____

Date: _____

Quadratic Equations

Class: Algebra

Topic: Quadratic-Linear Systems

Try Now

State the number of solutions a Quadratic Linear system can have.

1) Sketch each type of solution below.

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Model

1 Solve the following system of equations

algebraically: $y = x^2 + 5x - 17$

$$y = x - 5$$

Solution(s): _____

CFU_Think-Pair-Share

- 2 Solve the following system of equations algebraically for *all* values of x and y .

$$y = x^2 + 2x - 8$$

$$y = 2x + 1$$

- 3 Solve the following system of equations algebraically.

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

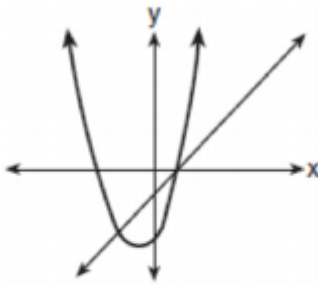
$$y = 2x + 1$$

- 4 Solve the following system of equations algebraically: $y = x^2 - 6x + 9$

$$y = -9x + 19$$

Independent Practice:

- 1 The accompanying diagram shows the graphs of a linear equation and a quadratic equation.



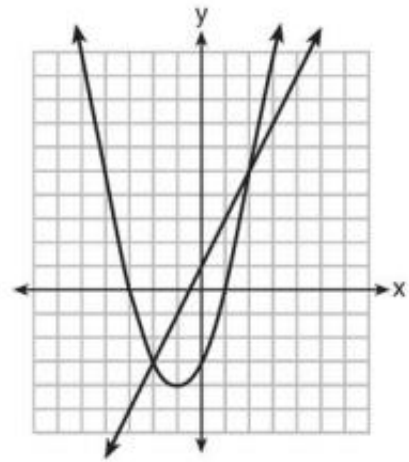
How many solutions are there to this system of equations?

- 1) 1
- 2) 2
- 3) 3
- 4) 0

- 2 What is the solution of the system of equations graphed below?

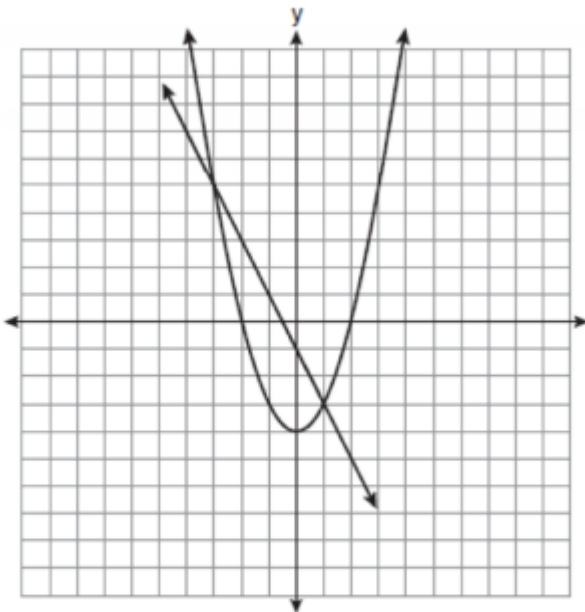
$$y = 2x + 1$$

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



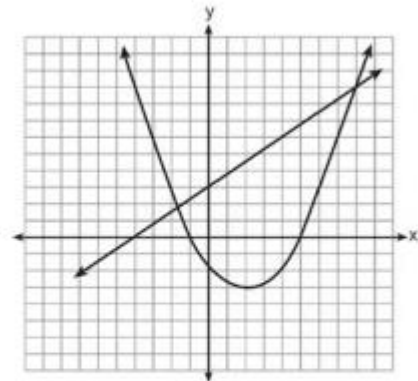
- 1) (0, -3)
- 2) (-1, -4)
- 3) (-3, 0) and (1, 0)
- 4) (-2, -3) and (2, 5)

- 3 Which ordered pair is a solution of the system of equations shown in the graph below?



- 1) (-3, 1)
- 2) (-3, 5)
- 3) (0, -1)
- 4) (0, -4)

- 4 Two equations were graphed on the set of axes below.



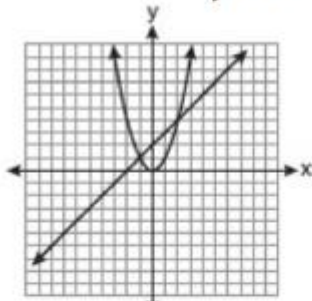
Which point is a solution of the system of equations shown on the graph?

- 1) (8, 9)
- 2) (5, 0)
- 3) (0, 3)
- 4) (2, -3)

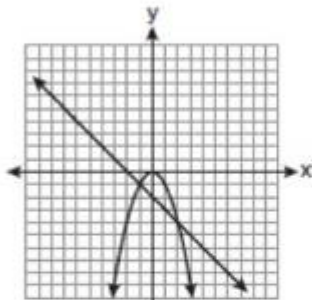
5 Which graph could be used to find the solution to the following system of equations?

$$y = -x + 2$$

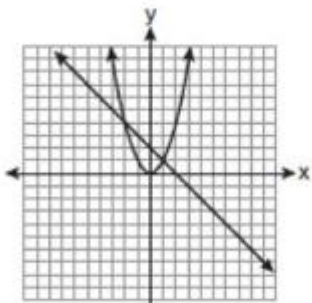
$$y = x^2$$



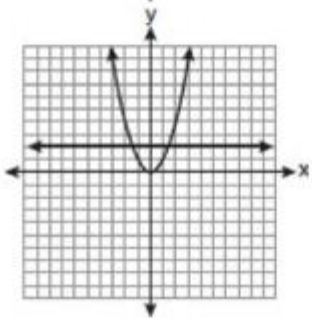
1)



2)



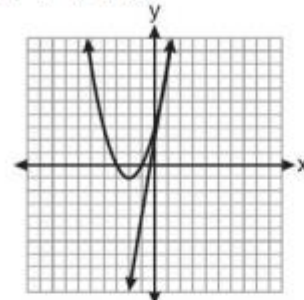
3)



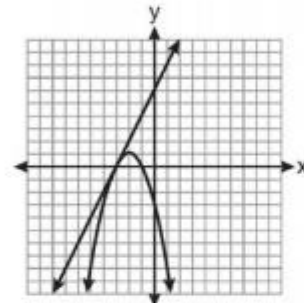
4)

6 Which graph could be used to find the solution of the system of equations $y = 2x + 6$ and

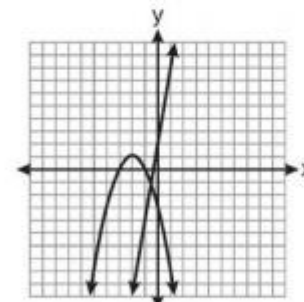
$$y = x^2 + 4x + 3?$$



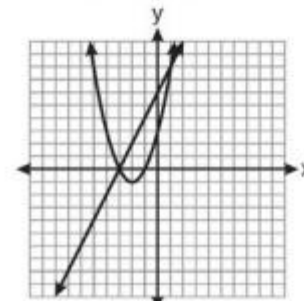
1)



2)



3)

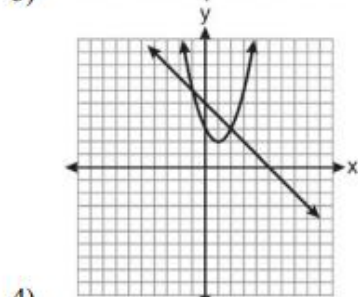
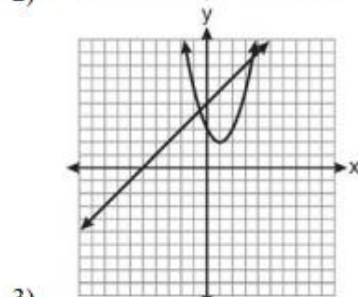
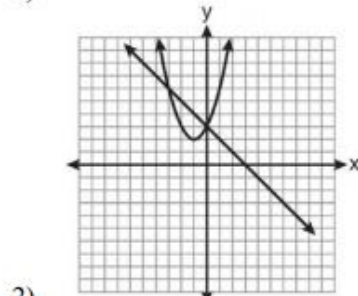
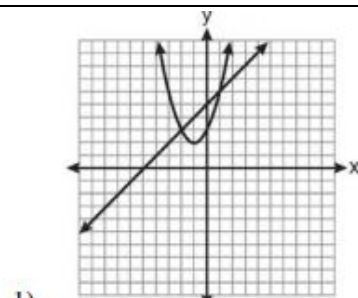


4)

7 Which graph can be used to find the solution of the following system of equations?

$$y = x^2 + 2x + 3$$

$$2y - 2x = 10$$



Solve the following system of equations algebraically or graphically for x and y :

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

$$y = x - 1$$

