

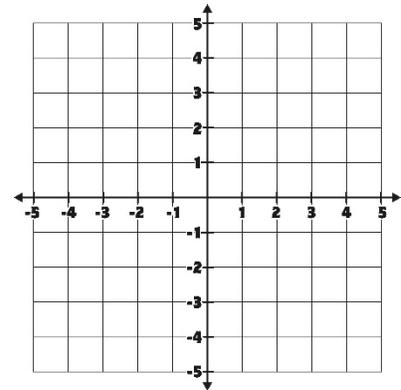
NAME \_\_\_\_\_

## BELL RINGER

1.) The scale on a map is 0.5 inches equals 5 miles. The measured distance from Barker to Edmond is 3 inches. What is the distance in miles?

2.) Simplify  $6 - 2 \cdot 5^2 + 3$ .

3.) Graph  $y = 2x - 5$



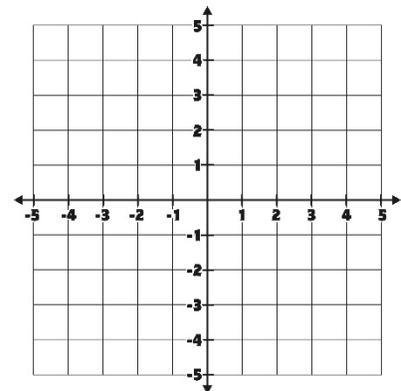
NAME \_\_\_\_\_

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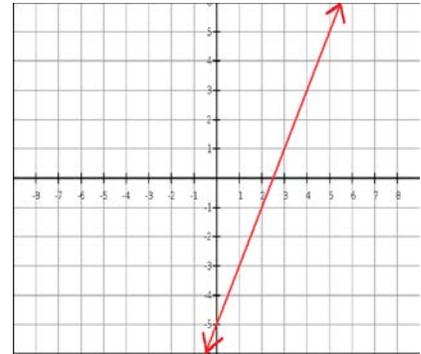
NAME ANSWER KEY

## BELL RINGER

1.) The scale on a map is 0.5 inches equals 5 miles. The measured distance from Barker to Edmond is 3 inches. What is the distance in miles? **0.3 miles**

2.) Simplify  $6 - 2 \cdot 5^2 + 3$ . **-41**

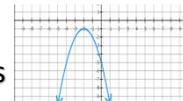
3.) Graph  $y = 2x - 5$



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## Solving Systems of Linear Equations

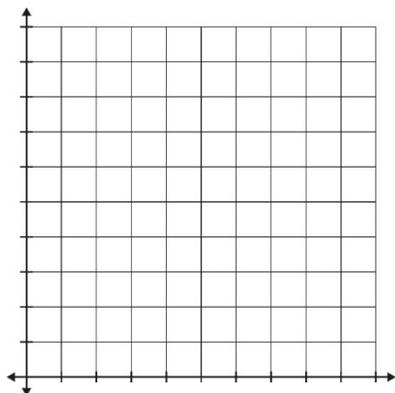
HSA-REI.C.6

NAME \_\_\_\_\_

You are starting your own lawn mowing business. You purchase a lawn mower for \$160. It will cost \$3 in gas and oil expenses per lawn that you mow. You are charging \$35 per lawn.



- How many lawns must you mow to make enough money to break even?
- How much money will it cost you to mow 6 lawns? Write an equation to show the cost,  $C$ , of mowing  $n$  number of lawns.
- How much revenue (money) will you make mowing 6 lawns? Write an equation to show the revenue,  $R$ , of mowing  $n$  number of lawns.
- How much money did you make profit as a result of mowing 6 lawns?
- Graph your two equations on the coordinate plane below. Describe the meaning of the point of intersection of the two lines in the context of the situation.



## Solving Systems of Linear Equations

HSA-REI.C.6

NAME **ANSWER KEY**

You are starting your own lawn mowing business. You purchase a lawn mower for \$160. It will cost \$3 in gas and oil expenses per lawn that you mow. You are charging \$35 per lawn.



a. How many lawns must you mow to make enough money to break even?

**5 lawns**

b. How much money will it cost you to mow 6 lawns? Write an equation to show the cost,  $C$ , of mowing  $n$  number of lawns. **\$178;  $C = 3n + 160$**

c. How much revenue (money) will you make mowing 6 lawns? Write an equation to show the revenue,  $R$ , of mowing  $n$  number of lawns. **\$210;  $R = 35n$**

d. How much money did you make profit as a result of mowing 6 lawns? **\$32**

e. Graph your two equations on the coordinate plane below. Describe the meaning of the point of intersection of the two lines in the context of the situation. **(5, 175)**

**Mowing 5 lawns results in the cost and revenue both be \$175.**



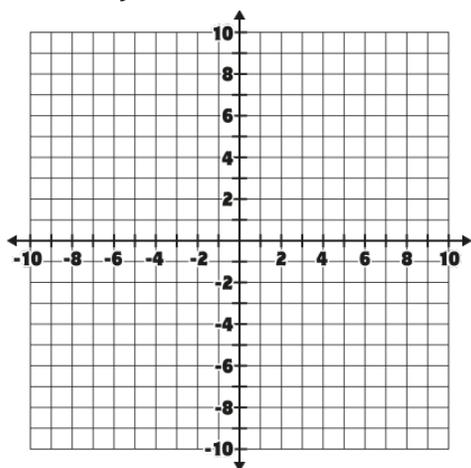
## Solving Systems of Linear Equations

HSA-REI.C.6

NAME \_\_\_\_\_

A solution to a system of linear equations is the solution(s) that the equations have in common. There are many ways to solve a system of equations. Here are three “quick” methods for solving systems of equations.

By graphing:  $y = \frac{1}{2}x + 5$   
 $y = 2x - 1$



By substitution:  $x + 2y = -6$   
 $y = x + 9$

By elimination:  $x - 2y = 10$   
 $2x + 2y = -4$

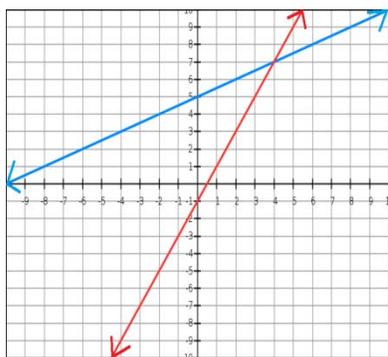
## Solving Systems of Linear Equations

HSA-REI.C.6

NAME ANSWER KEY

A solution to a system of linear equations is the solution(s) that the equations have in common. There are many ways to solve a system of equations. Here are three “quick methods for solving systems of equations.

By graphing:  $y = \frac{1}{2}x + 5$      $(4, 7)$   
 $y = 2x - 1$



By substitution:  $x + 2y = -6$      $(-8, 1)$   
 $y = x + 9$

By elimination:  $x - 2y = 10$      $(2, -4)$   
 $2x + 2y = -4$

Score: \_\_\_\_/\_\_\_\_

## EXIT SLIP

NAME \_\_\_\_\_

**STANDARD:** HSA-REI.C.6

**OBJECTIVE:** Students will be able to solve systems of linear equations using graphing, elimination, and substitution.

Solve the system by substitution.

$$\begin{aligned}y &= x + 5 \\ 3x + y &= 9\end{aligned}$$

On a scale from 1-5, 5 being the greatest, how well do you understand this standard? Circle your number below.

1 2 3 4 5

Score: \_\_\_\_/\_\_\_\_

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NAME **ANSWER KEY**

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Solve the system by substitution.

$$\begin{aligned}y &= x + 5 \\ 3x + y &= 9\end{aligned}$$

(1, 6)

On a scale from 1-5, 5 being the greatest, how well do you understand this standard? Circle your number below.

1 2 3 4 5

Special thanks to:



graphsketch.com



A

Solve the system of equations.

$$\begin{aligned}x + y &= 6 \\x - y &= -4\end{aligned}$$

B

Solve the system of equations.

$$\begin{aligned}y &= 6x + 9 \\y &= x - 4\end{aligned}$$

C

Solve the system of equations.

$$y = -x - 3$$

$$x + y = 7$$

D

Solve the system of equations.

$$x = 2y + 10$$

$$3x - y = 10$$

E

Solve the system of equations.

$$4x + y = -6$$

$$4x - y = -2$$

F

Solve the nonlinear system of equations.

$$x + y = 2$$

$$y = x - 4$$

# Solving Systems of Equations Gallery Walk Student Recording Sheet

NAME \_\_\_\_\_

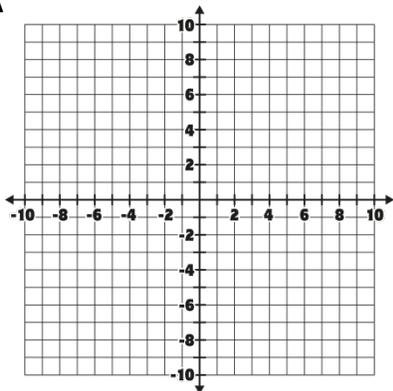
Solve each system of equations. There are coordinate planes on the next page for solving by graphing if that is the method you want to use to solve.

A	D
B	E
C	F

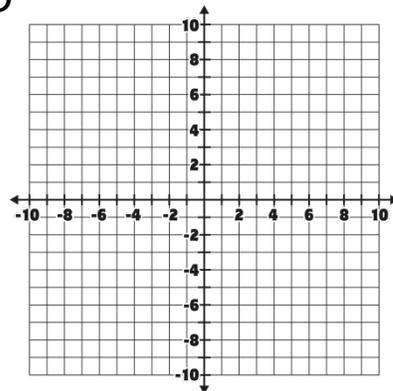
# Solving Systems of Equations Gallery Walk Student Recording Sheet

Coordinate planes for solving by graphing.

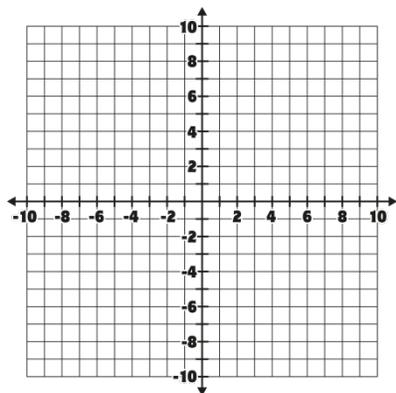
A



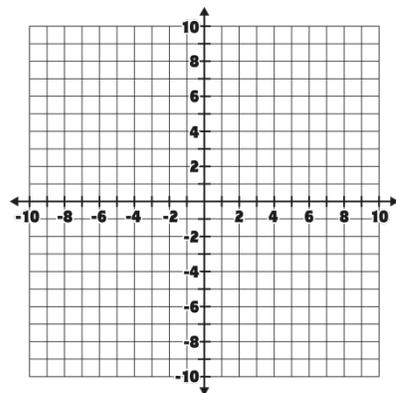
D



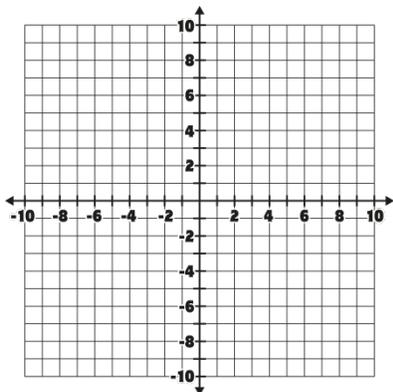
B



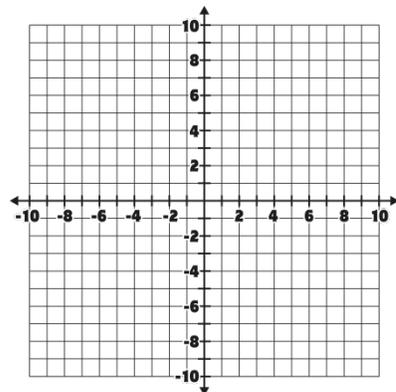
E



C



F



# Gallery Walk Problem Answer Key

A.)  $x + y = 6$                        $(1, 5)$   
 $x - y = -4$

B.)  $y = 6x + 9$                        $\left(-\frac{13}{5}, -\frac{33}{5}\right)$   
 $y = x - 4$

C.)  $y = -x - 3$                       no solutions  
 $x + y = 7$

D.)  $x = 2y + 10$                        $(2, -4)$   
 $3x - y = 10$

E.)  $4x + y = -6$                        $(-1, -2)$   
 $4x - y = -2$

F.)  $x + y = 2$                            $(3, -1)$   
 $y = x - 4$

Special thanks to:

