

## Solving Systems of Two Equations w/ Cramer's Rule

Date \_\_\_\_\_ Period \_\_\_\_\_

**Use Cramer's Rule to solve each system.**

1) 
$$\begin{aligned}x - 5y &= -5 \\ -4x - 2y &= 20\end{aligned}$$

2) 
$$\begin{aligned}-x + 5y &= 2 \\ x - 2y &= -2\end{aligned}$$

3) 
$$\begin{aligned}2x + 2y &= 0 \\ 4x - y &= -20\end{aligned}$$

4) 
$$\begin{aligned}3x - 4y &= 1 \\ -5x + 2y &= 3\end{aligned}$$

5) 
$$\begin{aligned}-x - y &= -1 \\ 3x + 3y &= 3\end{aligned}$$

6) 
$$\begin{aligned}-5x + 5y &= 10 \\ -2x + 2y &= -4\end{aligned}$$

7) 
$$\begin{aligned}-x + 4y &= -2 \\ -2x + 5y &= -4\end{aligned}$$

8) 
$$\begin{aligned}-5x - 5y &= 25 \\ -2x - 4y &= 16\end{aligned}$$

9) 
$$\begin{aligned}4x + 4y &= -32 \\ 2x + 2y &= -16\end{aligned}$$

10) 
$$\begin{aligned}7a - b &= -1 \\ -4a - 2b &= -2\end{aligned}$$

11) 
$$\begin{aligned}4r + s &= -14 \\ -5r - 5s &= 25\end{aligned}$$

12) 
$$\begin{aligned}x - 3y &= 5 \\ -3x + 6y &= 8\end{aligned}$$

13) 
$$\begin{aligned}6a + b &= -2 \\ 5a + 6b &= -2\end{aligned}$$

14) 
$$\begin{aligned}2a - 3b &= -8 \\ 4a + 3b &= -34\end{aligned}$$

## Solving Systems of Two Equations w/ Cramer's Rule

Use Cramer's Rule to solve each system.

1)  $x - 5y = -5$   
 $-4x - 2y = 20$

 $(-5, 0)$ 

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

 $(-2, 0)$ 

3)  $2x + 2y = 0$   
 $4x - y = -20$

 $(-4, 4)$ 

4)  $3x - 4y = 1$   
 $-5x + 2y = 3$

 $(-1, -1)$ 

5)  $-x - y = -1$   
 $3x + 3y = 3$

Infinitely many solutions

6)  $-5x + 5y = 10$   
 $-2x + 2y = -4$

No solution.

7)  $-x + 4y = -2$   
 $-2x + 5y = -4$

 $(2, 0)$ 

8)  $-5x - 5y = 25$   
 $-2x - 4y = 16$

 $(-2, -3)$ 

9)  $4x + 4y = -32$   
 $2x + 2y = -16$

Infinitely many solutions

10)  $7a - b = -1$   
 $-4a - 2b = -2$

 $(0, 1)$ 

11)  $4r + s = -14$   
 $-5r - 5s = 25$

 $(-3, -2)$ 

12)  $x - 3y = 5$   
 $-3x + 6y = 8$

 $\left(-18, -\frac{23}{3}\right)$ 

13)  $6a + b = -2$   
 $5a + 6b = -2$

 $\left(-\frac{10}{31}, -\frac{2}{31}\right)$ 

14)  $2a - 3b = -8$   
 $4a + 3b = -34$

 $(-7, -2)$