Review – Solving Systems of Equations

- Read the instructions carefully. •
- Show all your work to receive full credit! •

Tell whether the ordered pair is a solution of the given system.

1.
$$(-2, 1); \begin{cases} y = -2x - 3 \\ y = x + 3 \end{cases}$$
 2. $(9, 2); \begin{cases} x - 4y = 1 \\ 2x - 3y = 3 \end{cases}$ **3.** $(3, -1); \begin{cases} y = -\frac{1}{3}x \\ y + 2x = 5 \end{cases}$

Solve each system by graphing.



6. Which is incorrect? Explain the error.

$$\begin{cases} x + y = -3 & x + y = -3 \\ 3x + y = 3 & -(3x + y = 3) \\ -2x = 0 & x = 0 \end{cases}$$

$$\begin{cases} x + y = -3 & x + y = -3 \\ 3x + y = 3 & -(3x + y = 3) \\ -2x = -6 & x = 3 \end{cases}$$

Solve each system by substitution. Check your solution. o

7.		8.	
	$\int y = -x + 5$	$\int 4x - 3y = -1$	
	2x + y = 11	$\int 3x - y = -2$	

Solve each system by elimination. Check your solution.

9.	10.
$\int x + 3y = 15$	$\int -2x + 5y = -1$
$\begin{cases} 2x - 3y = -6 \end{cases}$	$\begin{cases} 3x + 2y = 11 \end{cases}$

_____ Date: _____ Period: _____

11. Christiana and Marlena opened their first savings accounts on the same day. Christiana opened her account with \$50 and plans to deposit \$10 every month. Marlena opened her account with \$30 and plans to deposit \$15 every month.

a. After how many months will their two accounts have the same amount of money?

Define variables:

12. Kiara and Brooklyn went to a Mexican restaurant. Kiara paid \$9 for 2 tacos and 3 enchiladas. Brooklyn paid \$12.50 for 3 tacos and 4 enchiladas. How much does each delicious item cost?

_____ Define variables: _____

13. It takes Akira 10 minutes to make a black and white drawing and 25 minutes for a color drawing. On Saturday he made a total of 9 drawings in 2 hours. Write and solve a system of equations to determine how many drawings of each type Akira made.

Define variables: _____