

## Solving Systems by Substitution HW-1

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

**Solve each system by substitution.CHOOSE 1**

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

2)  $y = -3$   
 $y = -2x + 11$

**Solve each system by substitution.CHOOSE 2**

3)  $y = -4x + 5$   
 $-6x - 7y = -13$

4)  $-x - 6y = 15$   
 $y = 6x + 16$

5)  $y = -7x - 16$   
 $2x + 8y = -20$

6)  $-2x - 5y = -8$   
 $y = x + 3$

**Solve each system by substitution. CHOOSE 2**

7)  $x + 3y = 23$   
 $-6x + 4y = 16$

8)  $3x - 4y = -17$   
 $3x + y = -22$

$$\begin{aligned} 9) \quad 3x + 2y &= -24 \\ x + 3y &= -15 \end{aligned}$$

$$\begin{aligned} 10) \quad 7x + 7y &= 14 \\ -4x + y &= 22 \end{aligned}$$

**Solve each system by substitution.**

$$\begin{aligned} 11) \quad -5x + 8y &= -12 \\ -7x + 4y &= -24 \end{aligned}$$

**1. Write a system of equations. 2. Solve for x and y**

12) The sum of two numbers is 21. Their difference is 5. What are the numbers?

13) The school that Heather goes to is selling tickets to the annual dance competition. On the first day of ticket sales the school sold 10 adult tickets and 8 child tickets for a total of \$126. The school took in \$123 on the second day by selling 9 adult tickets and 8 child tickets. Find the price of an adult ticket and the price of a child ticket.

## Solving Systems by Substitution HW-1

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

## Solve each system by substitution. CHOOSE 1

1)  $y = 5x - 4$

$y = 4x - 3$

 $(1, 1)$ 

2)  $y = -3$

$y = -2x + 11$

 $(7, -3)$ 

## Solve each system by substitution. CHOOSE 2

3)  $y = -4x + 5$

$-6x - 7y = -13$

 $(1, 1)$ 

4)  $-x - 6y = 15$

$y = 6x + 16$

 $(-3, -2)$ 

5)  $y = -7x - 16$

$2x + 8y = -20$

 $(-2, -2)$ 

6)  $-2x - 5y = -8$

$y = x + 3$

 $(-1, 2)$ 

## Solve each system by substitution. CHOOSE 2

7)  $x + 3y = 23$

$-6x + 4y = 16$

 $(2, 7)$ 

8)  $3x - 4y = -17$

$3x + y = -22$

 $(-7, -1)$

$$\begin{aligned} 9) \quad & 3x + 2y = -24 \\ & x + 3y = -15 \end{aligned}$$

$$(-6, -3)$$

$$\begin{aligned} 10) \quad & 7x + 7y = 14 \\ & -4x + y = 22 \end{aligned}$$

$$(-4, 6)$$

**Solve each system by substitution.**

$$\begin{aligned} 11) \quad & -5x + 8y = -12 \\ & -7x + 4y = -24 \end{aligned}$$

$$(4, 1)$$

**1. Write a system of equations. 2. Solve for x and y**

12) The sum of two numbers is 21. Their difference is 5. What are the numbers?

8 and 13

13) The school that Heather goes to is selling tickets to the annual dance competition. On the first day of ticket sales the school sold 10 adult tickets and 8 child tickets for a total of \$126. The school took in \$123 on the second day by selling 9 adult tickets and 8 child tickets. Find the price of an adult ticket and the price of a child ticket.

adult ticket: \$3, child ticket: \$12