

## Solving Systems by Substitution Day 2

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

**Solve each system by substitution.**

1)  $y = 3x + 6$   
 $-3x - 2y = 15$

2)  $-6x + 2y = 7$   
 $y = 3x - 6$

**Solve each equation.**

3)  $10 + \frac{r}{7} = 10$

4)  $-30 = 3(-4 + x)$

**Solve each system by substitution.**

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

6)  $y = -5x - 22$   
 $y = -2x - 10$

**Solve each equation.**

7)  $3 - 10x = -7$

8)  $-82 = 8x + 6$

**Solve each system by substitution.**

9)  $-x - 3y = 6$   
 $y = 8x - 2$

10)  $y = 3x - 1$   
 $3x - y = 7$

**Solve each equation.**

11)  $4x - 38 = 7(-5 + 7x) - 3$

12)  $-8p - 20 = 5(-4 + 6p)$

**Solve each system by substitution.**

13)  $y = 3x - 2$   
 $y = -5$

14)  $y = x + 1$   
 $y = 6x - 14$

**Solve each equation.**

15)  $2(3 - n) = -8(n - 2) - 4$

16)  $3(m - 3) + 3(-6m - 3) = -8m + 2m$

**Solve each proportion.**

17)  $-\frac{n}{8} = \frac{7}{4}$

- A) {2.4}      B) {-14}  
C) {1}        D) {-6}  
E) {2.1}

18)  $\frac{5}{8} = -\frac{b}{3}$

- A) {1.6}      B) {-1.87}  
C) {10}       D) {-10}  
E) {-4.5}

**Solve each system by substitution.**

19)  $y = 3x - 8$   
 $y = -6x - 8$

20)  $y = -2x - 6$   
 $y = 4x - 6$

21)  $-15x - 3y = 48$   
 $y = -5x - 16$

22)  $y = 7x - 6$   
 $-8x + 7y = -1$

**Solve each problem.**

- 23) 122 is what percent of 57?  
A) 2.1%      B) 214%  
C) 0.47%     D) 156.7%  
E) 46.7%

- 24) 210% of 78 is what?  
A) 10624      B) 37.1  
C) 163.8      D) 34.8  
E) 16380