

## 5-1 Solving equations using Substitution

Name: \_\_\_\_\_

Time> Start: \_\_\_\_\_ Finish: \_\_\_\_\_ Total Time = \_\_\_\_\_

Solve each system of equations.

\_\_\_\_\_ 1. 
$$\begin{cases} y = 2x + 5 \\ 2x + y = 9 \end{cases}$$

\_\_\_\_\_ 2. 
$$\begin{cases} y = -x + 5 \\ x + 2y = -2 \end{cases}$$

\_\_\_\_\_ 3. 
$$\begin{cases} y = 2x + 5 \\ y = 3x + 1 \end{cases}$$

\_\_\_\_\_ 4. 
$$\begin{cases} x = 9 - y \\ 2x = 2y - 6 \end{cases}$$

\_\_\_\_\_ 5. 
$$\begin{cases} y = x - 4 \\ 2x - y = 9 \end{cases}$$

\_\_\_\_\_ 6. 
$$\begin{cases} y = 3x - 5 \\ x - 3y = -1 \end{cases}$$

\_\_\_\_\_ 7. 
$$\begin{cases} y = 2(x + 5) \\ 2x - 2y = -22 \end{cases}$$

\_\_\_\_\_ 8. 
$$\begin{cases} x = 6 + y \\ 3x + y = 18 \end{cases}$$

\_\_\_\_\_ 9. 
$$\begin{cases} y = 2x + 5 \\ y = 4x + 1 \end{cases}$$

\_\_\_\_\_ 10. 
$$\begin{cases} y = 2x + 1 \\ y = 2x + 5 \end{cases}$$

## SAT Questions

- \_\_\_\_\_ 17. All numbers divisible by both 4 and 15 are also divisible by which of the following?  
A. 6      B. 8      C. 18      D. 24      E. 45
- \_\_\_\_\_ 18. If  $a = 4$ , which of the following is equivalent to  $am^2 + am + a$ ?  
A.  $4(m^3 + 1)$   
B.  $4(m + 1)^2$   
C.  $4(m^2 + m)$   
D.  $4(m^2 + m + 1)$   
E.  $4(4m^2 + m + 1)$
- \_\_\_\_\_ 19. The length of a nail rounded to the nearest inch is 5 inches. Which of the following could be the actual length of the nail, in inches?  
A. 4.46      B. 4.48      C. 5.32      D. 5.51      E. 5.89