

Name Key  
Mrs. Roubos

Date \_\_\_\_\_  
8R Period \_\_\_\_\_

Homework

Solve the equation for the given variable

#1: Solve + State the properties used  
#2: Solve + check

1)  $4x + 8 + 2x = 20$

$$\begin{array}{r}
 6x + 8 = 20 \\
 \underline{-8 \quad -8} \quad \text{Subtraction Property} \\
 6x = 12 \quad \text{of Equality} \\
 \underline{\div 6 \quad \div 6} \quad \text{Division Property} \\
 x = 2 \quad \text{of Equality}
 \end{array}$$

2)  $13 + 2y - y = 16$

$$\begin{array}{r}
 1y + 13 = 16 \\
 \underline{-13 \quad -13} \\
 y = 3
 \end{array}$$

Check

$$\begin{array}{l}
 13 + 2y - y = 16 \\
 13 + 2(3) - (3) = 16 \\
 13 + 6 - 3 = 16 \\
 19 - 3 = 16 \\
 16 = 16
 \end{array}$$

3)  $3 + 4y - 5 = 6$

$$\begin{array}{r}
 -2 + 4y = 6 \\
 \underline{+2 \quad +2} \\
 4y = 8 \\
 \underline{\div 4 \quad \div 4} \\
 y = 2
 \end{array}$$

4)  $38 = 7d + 4 + 6$

$$\begin{array}{r}
 38 = 10 + 7d \\
 \underline{-10 \quad -10} \\
 28 = 7d \\
 \underline{\div 7 \quad \div 7} \\
 d = 4
 \end{array}$$

5)  $37 = 3m + 7 + 12m$

$$\begin{array}{r}
 37 = 15m + 7 \\
 \underline{-7 \quad -7} \\
 30 = 15m \\
 \underline{\div 15 \quad \div 15} \\
 m = 2
 \end{array}$$

6)  $6a - 2a - 4 = 4$

$$\begin{array}{r}
 4a - 4 = 4 \\
 \underline{+4 \quad +4} \\
 4a = 8 \\
 \underline{\div 4 \quad \div 4} \\
 a = 2
 \end{array}$$