

College Prep Algebra
Worksheet 6 , Solving Equations
Answer Key

$$\begin{aligned} 1. \quad m = 7 & \Rightarrow \\ & -3(7) = 4(7) - 49 \\ & -21 = 28 - 49 \\ & -21 = -21 \end{aligned}$$

$$2. \quad x = -30$$

$$\begin{aligned} 3. \quad x = -8 & \Rightarrow \\ 3(-8 - 3) & = 4(-8) - 1 \\ 3(-11) & = -32 - 1 \\ -33 & = -33 \end{aligned}$$

$$4. \quad x = \frac{17}{3} \text{ or } x = 5\frac{2}{3}$$

$$\begin{aligned} 5. \quad x = -10 & \Rightarrow \\ 2(-10 - 10) & = -15(-10) + 19(-10) \\ 2(-20) & = 150 - 190 \\ -40 & = -40 \end{aligned}$$

$$6. \quad x = 4$$

$$\begin{aligned} 7. \quad x = -5 & \Rightarrow \\ 7(-5) + 5 & = 3[3(-5) + 5] \\ -35 + 5 & = 3[-15 + 5] \\ -30 & = 3[-10] \\ -30 & = -30 \end{aligned}$$

$$8. \quad x = -\frac{28}{3} \text{ or } x = -9\frac{1}{3}$$

$$\begin{aligned} 9. \quad x = -3 & \Rightarrow \\ 5(-3) - 3[2 + 3(-3)] & = 6 \\ 5(-3) - 3[2 - 9] & = 6 \\ 5(-3) - 3[-7] & = 6 \\ -15 + 21 & = 6 \\ 6 & = 6 \end{aligned}$$

$$10. \quad x = 2$$

$$\begin{aligned} 11. \quad x = 1 & \Rightarrow \\ 6[3 - 4(1)] + 12 & = 10(1) - 2[5 - 3(1)] \\ 6[3 - 4] + 12 & = 10(1) - 2[5 - 3] \\ 6[-1] + 12 & = 10(1) - 2[2] \\ -6 + 12 & = 10 - 4 \\ 6 & = 6 \end{aligned}$$

$$12. \quad x = 2$$