

ALL PROBLEMS CAN BE COMPLETED ON THIS WORKSHEET

**WS 12.1 - Solving Two-Step Equations**

Solve each equation.

|  |  |
|--|--|
| 1. $5x + 9 = 39$<br>$-9 \quad -9$<br>$\frac{5x}{5} = \frac{30}{5}$<br>$x = 6$                            | 2. $6 - 2d = 42$<br>$-6 \quad -6$<br>$\frac{-2d}{-2} = \frac{36}{-2}$<br>$d = -18$                       |
| 3. $2m + 5 = 17$<br>$-5 \quad -5$<br>$\frac{2m}{2} = \frac{12}{2}$<br>$m = 6$                            | 4. $3x + 6 = 54$<br>$-6 \quad -6$<br>$\frac{3x}{3} = \frac{48}{3}$<br>$x = 16$                           |
| 5. $6 - 8d = -42$<br>$-6 \quad -6$<br>$\frac{-8d}{-8} = \frac{-48}{-8}$<br>$d = 6$                       | 6. $12 = 9x - 6$<br>$+6 \quad +6$<br>$\frac{18}{9} = \frac{9x}{9}$<br>$2 = x \Rightarrow x = 2$          |
| 7. $-4 - 11w = 18$<br>$+4 \quad +4$<br>$\frac{-11w}{-11} = \frac{22}{-11}$<br>$w = -2$                   | 8. $36 = -3y + 12$<br>$-12 \quad -12$<br>$\frac{24}{-3} = \frac{-3y}{-3}$<br>$-8 = y \Rightarrow y = -8$ |
| 9. $10m + 3.4 = 7$<br>$-3.4 \quad -3.4$<br>$\frac{10m}{10} = \frac{3.6}{10}$<br>$m = 0.36$               | 10. $127 = 2x + 17$<br>$-17 \quad -17$<br>$\frac{110}{2} = \frac{2x}{2}$<br>$55 = x \Rightarrow x = 55$  |
| 11. $-8m - 12 = 20$<br>$+12 \quad +12$<br>$\frac{-8m}{-8} = \frac{32}{-8}$<br>$m = -4$                   | 12. $5.2 + 1.3x = -1.3$<br>$-5.2 \quad -5.2$<br>$\frac{1.3x}{1.3} = \frac{-6.5}{1.3}$<br>$x = -5$        |
| 13. $\frac{x}{5} - 2 = 3.7$<br>$+2 \quad +2$<br>$\frac{x \cdot 5}{5} = 5.7 \cdot 5 \Rightarrow x = 28.5$ | 14. $15 = \frac{a}{3} - 2$<br>$+2 \quad +2$<br>$17 = \frac{a}{3} \Rightarrow 51 = a \Rightarrow a = 51$  |
| 15. $\frac{p}{3} - 2 = -56$<br>$+2 \quad +2$<br>$\frac{p \cdot 3}{3} = -54 \cdot 3 \Rightarrow p = -162$ | 16. $\frac{z}{2} - 22 = -20$<br>$+22 \quad +22$<br>$\frac{z \cdot 2}{2} = 2 \cdot 2 \Rightarrow z = 4$   |