

Chapter 3 Practice Exercises (Solutions at www.789adam.com)

Solve each equation for the variable. Show your steps and check your solution(s).

$$5j - 3 = 12$$

$$\frac{5j}{5} = \frac{15}{5}$$

$$j = 3$$

$$15 - 7w = 36$$

$$\frac{-7w}{-7} = \frac{21}{-7}$$

$$w = -3$$

$$2w + 1 = 4w + 2$$

$$1 = 4w - 2w + 2$$

$$-1 = 4w - 2w$$

$$\frac{-1}{2} = \frac{2w}{2}$$

$$-\frac{1}{2} = w$$

$$b + 1 = -6$$

$$-1 = -1$$

$$b = -7$$

$$\frac{5(x+2)}{5} = \frac{25}{5}$$

$$\frac{x+2}{-2} = \frac{5}{-2}$$

$$x = 3$$

$$3x^2 - 2 = 10 + 2$$

$$\frac{3x^2}{3} = \frac{12}{3}$$

$$\sqrt{x^2} = \sqrt{4}$$

$$x = 2 \text{ or } x = -2$$

$$n - 3 = 4$$

$$+3 \quad +3$$

$$n = 7$$

$$y + 7 = 3y + 1$$

$$7 = 3y - y + 1$$

$$\frac{6}{2} = \frac{2y}{2}$$

$$y = 3$$

$$4 \cdot \frac{2z-3}{4} = 12 \cdot 4$$

$$2z - 3 = 48 + 3$$

$$\frac{2z}{2} = \frac{51}{2}$$

$$z = \frac{51}{2}$$

$$32 = 5 - 3a$$

$$\frac{27}{-3} = \frac{-39}{-3}$$

$$-9 = a$$

$$\frac{4x}{4} = \frac{2}{4}$$

$$x = \frac{2}{4}$$

$$x = \frac{1}{2}$$

$$10(m-1) + 4 = 3(2m+5) + 3$$

$$10m - 10 + 4 = 6m + 15 + 3$$

$$4m - 6 = 18$$

$$\frac{4m}{4} = \frac{24}{4}$$

$$m = 6$$