

## ANSWER KEY 2.1

- 1) The Addition Property of Equality says that whatever you add to one side of an equation you must add to the other side.
- 2) Two or more equations that have precisely the same solution are called equivalent equations.
- 3) To solve the equation  $p + 9 = -11$  we subtract 9 from each side of the equation.
- 4) False ( $x^2$  is not linear)
- 5) False (the reciprocal of multiplication is division not sub.)
- 6) True

$$15) 8k - 2 = 4 \quad k = \frac{3}{4}$$

$$8\left(\frac{3}{4}\right) - 2 = 4$$

$$2) 8\left(\frac{3}{4}\right) - 2 = 4$$

$$6 - 2 = 4$$

$$4 = 4$$

yes  $k = \frac{3}{4}$  satisfies

$$57) n - 4 = -2$$

$$\begin{array}{r} +4 \quad +4 \\ \hline \end{array}$$

$$n = 2$$

$$60) c + 4 = 1$$

$$\begin{array}{r} -4 \quad -4 \\ \hline \end{array}$$

$$c = -3$$

$$63) -4g = 24$$

$$\begin{array}{r} -4 \quad -4 \\ \hline \end{array}$$

$$g = -6$$

$$66) -637 = c - 142$$

$$\begin{array}{r} +142 \quad +142 \\ \hline \end{array}$$

$$-495 = c$$

$$69) \frac{x}{5} = -10$$

$$(5) \frac{x}{5} = -10 (5)$$

$$x = -50$$

$$72) p - 26.4 = -471.3$$

$$\begin{array}{r} +26.4 \quad +26.4 \\ \hline \end{array}$$

$$p = -444.9$$

$$75) 14 = -\frac{7}{2}c$$

$$\left(-\frac{2}{7}\right)\left(14\right) = \left(-\frac{2}{7}\right)\left(-\frac{7}{2}\right)c$$

$$-4 = c$$

$$78) \frac{5}{9} = -\frac{h}{36}$$

$$(-36) \frac{5}{9} = -\frac{h}{36} (-36)$$

$$-20 = h$$

$$81) -\frac{3}{16} = -\frac{3}{8} + z$$

$$\frac{-3}{16} + \frac{3}{8} = \frac{-3}{8} + z$$

$$\frac{3}{16} = z$$

$$83) \frac{5}{6} = -\frac{2}{3} z$$

$$\left(-\frac{3}{2}\right) \frac{5}{6} = \left(-\frac{2}{3}\right) \left(-\frac{3}{2}\right) z$$

$$-\frac{5}{4} = z$$