

Practice Quiz

Solve each equation.

1) $\frac{14p}{14} = \frac{-70}{14}$

$$p = -5$$

2) $\frac{7}{-1} = \frac{a}{+1} - 1$

$$8 = a$$

3) $\frac{-12}{-2} = \frac{x+2}{-2}$

$$-14 = x$$

4) $\frac{-9}{4} = \frac{n}{4} \times 4$

$$-36 = n$$

5) $\frac{r-17}{+17} = \frac{-32}{+17}$

$$r = -15$$

6) $\frac{n}{5} = -14 \times 5$

$$n = -70$$

7) $\frac{-20p}{-20} = \frac{160}{-20}$

$$p = -8$$

8) $\frac{x-18}{+18} = \frac{-2}{-18}$

$$x = 16$$

9) $\frac{-7n-6}{+6} = \frac{-55}{+6}$

$$\frac{-7n}{-7} = \frac{-49}{-7}$$

$$n = 7$$

10) $\frac{-101}{-7} = \frac{7+9n}{-7}$

$$\frac{-108}{9} = \frac{9n}{9}$$

$$-12 = n$$

11) $\frac{-17}{-8} = \frac{5b+8}{-8}$

$$\frac{-25}{5} = \frac{5b}{5}$$

$$-5 = b$$

12) $\frac{-6}{+6} + \frac{4m}{+6} = \frac{46}{+6}$

$$\frac{4m}{4} = \frac{52}{4}$$

$$m = 13$$

$$13) -8 - 9p = -134$$

$$\begin{array}{r} +8 \\ -8 - 9p = -134 \\ +8 \\ \hline -9p = -126 \\ -9 \quad -9 \\ \hline p = 14 \end{array}$$

$$p = 14$$

$$15) -4v + 9 = 57$$

$$\begin{array}{r} -9 \quad -9 \\ -4v + 9 = 57 \\ -9 \quad -9 \\ \hline -4v = 48 \\ -4 \quad -4 \\ \hline v = -12 \end{array}$$

$$v = -12$$

$$17) -133 = -7(-3x - 2)$$

$$\begin{array}{r} -133 = 21x + 14 \\ -14 \quad -14 \\ \hline -147 = 21x \end{array}$$

$$\begin{array}{r} -147 = 21x \\ 21 \quad 21 \\ \hline -7 = x \end{array}$$

$$-7 = x$$

$$19) 5(8 + 4x) = 160$$

$$\begin{array}{r} 40 + 20x = 160 \\ -40 \quad -40 \\ \hline 20x = 120 \\ 20 \quad 20 \\ \hline x = 6 \end{array}$$

$$x = 6$$

$$21) -198 = -6(1 - 4b)$$

$$\begin{array}{r} -198 = -6 + 24b \\ +6 \quad +6 \\ \hline -192 = 24b \end{array}$$

$$\begin{array}{r} -192 = 24b \\ 24 \quad 24 \\ \hline -8 = b \end{array}$$

$$-8 = b$$

$$23) 96 = -8(m - 7)$$

$$\begin{array}{r} 96 = -8m + 56 \\ -56 \quad -56 \\ \hline 40 = -8m \end{array}$$

$$\begin{array}{r} 40 = -8m \\ -8 \quad -8 \\ \hline -5 = m \end{array}$$

$$-5 = m$$

$$14) -6 - 6n = 108$$

$$\begin{array}{r} +6 \quad +6 \\ -6 - 6n = 108 \\ +6 \quad +6 \\ \hline -6n = 114 \\ -6 \quad -6 \\ \hline n = -19 \end{array}$$

$$n = -19$$

$$16) -6n + 7 = 49$$

$$\begin{array}{r} -6n + 7 = 49 \\ -7 \quad -7 \\ \hline -6n = 42 \\ -6 \quad -6 \\ \hline n = -7 \end{array}$$

$$n = -7$$

$$18) -2(-5p + 1) = -82$$

$$\begin{array}{r} 10p + 2 = -82 \\ +2 \quad +2 \\ \hline 10p = -80 \end{array}$$

$$\begin{array}{r} 10p = -80 \\ 10 \quad 10 \\ \hline p = -8 \end{array}$$

$$p = -8$$

$$20) 3(1 - 8n) = 123$$

$$\begin{array}{r} 3 - 24n = 123 \\ -3 \quad -3 \\ \hline -24n = 120 \end{array}$$

$$\begin{array}{r} -24n = 120 \\ -24 \quad -24 \\ \hline n = -5 \end{array}$$

$$n = -5$$

$$22) 7(7b - 5) = 259$$

$$\begin{array}{r} 49b - 35 = 259 \\ +35 \quad +35 \\ \hline 49b = 294 \end{array}$$

$$\begin{array}{r} 49b = 294 \\ 49 \quad 49 \\ \hline b = 6 \end{array}$$

$$b = 6$$

$$24) -8(8 + 8n) = 128$$

$$\begin{array}{r} -64 + -64n = 128 \\ +64 \quad +64 \\ \hline -64n = 192 \end{array}$$

$$\begin{array}{r} -64n = 192 \\ -64 \quad -64 \\ \hline n = 3 \end{array}$$

$$n = 3$$