

Introduction to Algebra

Name _____

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Solve each equation.

$$\begin{array}{r} 1) \ 16 = x + 15 \\ -15 \ -15 \\ \hline 1 = x \end{array}$$

$$\begin{array}{r} 2) \ 1 = x - 9 \\ +9 \ +9 \\ \hline 10 = x \end{array}$$

$$\begin{array}{r} 3) \ 18 = n + 9 \\ -9 \ -9 \\ \hline 9 = n \end{array}$$

$$\begin{array}{r} 4) \ 16 + b = 25 \\ -16 \ -16 \\ \hline b = 9 \end{array}$$

$$\begin{array}{r} 5) \ 1 = n - 18 \\ +18 \ +18 \\ \hline n = 19 \end{array}$$

$$\begin{array}{r} 6) \ 20 + n = 26 \\ -20 \ -20 \\ \hline n = 6 \end{array}$$

$$\begin{array}{r} 7) \ 11 = \frac{x}{2} \times 2 \\ \hline 22 = x \end{array}$$

$$\begin{array}{r} 8) \ \frac{x}{13} = 4 \times 13 \\ \hline x = 52 \end{array}$$

$$\begin{array}{r} 9) \ \frac{n}{9} = 20 \times 9 \\ \hline n = 180 \end{array}$$

$$\begin{array}{r} 10) \ \frac{160}{20} = \frac{20n}{20} \\ \hline 8 = n \end{array}$$

$$\begin{array}{r} 11) \ 16x = 48 \\ \frac{16}{16} \ \frac{16}{16} \\ \hline x = 3 \end{array}$$

$$\begin{array}{r} 12) \ 5 = \frac{n}{17} \times 17 \\ \hline 85 = n \end{array}$$

Harder. 2 Steps. Show your work! Solve each equation.

$$\begin{array}{r} 13) \ 29 = 7n + 1 \\ -1 \ -1 \\ 28 = 7n \\ \frac{28}{7} \ \frac{7n}{7} \\ \hline 4 = n \end{array}$$

$$\begin{array}{r} 14) \ 11 = \frac{x}{9} + 10 \\ -10 \ -10 \\ 1 = \frac{x}{9} \times 9 \\ \hline 9 = x \end{array}$$

$$15) 10n - 9 = 111$$

$$\begin{array}{r} +9 +9 \\ 10n = 120 \\ \hline 10 \quad 10 \\ \hline n = 12 \end{array}$$

$$16) 132 = 7r - 1$$

$$\begin{array}{r} +1 +1 \\ 133 = 7r \\ \hline 7 \quad 7 \\ \hline r = 19 \end{array}$$

$$17) 10 = 8 + \frac{n}{3}$$

$$\begin{array}{r} -8 -8 \\ 3 \times 2 = \frac{n}{3} \times 3 \\ \hline 6 = n \end{array}$$

$$18) 3n - 8 = 28$$

$$\begin{array}{r} +8 +8 \\ 3n = 36 \\ \hline 3 \quad 3 \\ \hline n = 12 \end{array}$$