

Algebra 1
Practice 3.2
Solve each equation.

12) $3x + 2 = 5$

$$\begin{array}{r} -2 \quad -2 \\ \hline 3x = 3 \\ \hline 3 \quad 3 \\ \hline x = 1 \end{array}$$

14) $-6 = k - 2 - 5$

$$\begin{array}{r} -6 \pm k - 7 \\ + 7 \quad + 7 \\ \hline 1 = k \end{array}$$
 COMBINE LIKE TERMS first!

13) $-1 = -x + 2$

$$\begin{array}{r} -1 = -x + 2 \\ -2 \quad -2 \\ \hline -3 = -x \\ + 3 \quad + 3 \\ \hline 0 = -x \\ x = 3 \end{array}$$

15) $7 = -5p + 4p$

$$\begin{array}{r} 7 = -5p + 4p \\ + 1 \quad + 1 \\ \hline 8 = -p \\ -8 \quad -8 \\ \hline 0 = -9 \\ a = -9 \end{array}$$

16) $-7a - 4a = 11$

$$\begin{array}{r} -11a = 11 \\ -11 \quad -11 \\ \hline a = -1 \end{array}$$
 CLT

18) $1 = 6p + 6 - p$

$$\begin{array}{r} 1 = 5p + 6 \\ -6 \quad -6 \\ \hline -5 = 5p \\ \hline -1 = p \end{array}$$
 CLT

17) $-6 = 2 + 5x - 6x$

$$\begin{array}{r} -6 = 2 - 1x \\ -2 \quad -2 \\ \hline -8 = -1x \\ + 8 \quad + 8 \\ \hline 0 = 7 \\ 7 = x \end{array}$$
 CLT

19) $-14.5 = -0.2 + 2.6x$

$$\begin{array}{r} -14.5 = -0.2 + 2.6x \\ + 0.2 \quad + 0.2 \\ \hline -14.3 = 2.6x \\ \hline -5.5 = x \end{array}$$

2) $6x + 1 = -11$

$$\begin{array}{r} 6x + 1 = -11 \\ -1 \quad -1 \\ \hline 6x = -12 \\ \hline 6 \quad 6 \\ \hline x = -2 \end{array}$$

3) $3 = -4p + 3$

$$\begin{array}{r} 3 = -4p + 3 \\ -3 \quad -3 \\ \hline 0 = -4p \\ + 4 \quad + 4 \\ \hline 4 = -4p \\ -4 \quad -4 \\ \hline 0 = -8 \\ 10 = p \end{array}$$

4) $\frac{a}{3} - 7 = -10$

$$\begin{array}{r} \frac{a}{3} - 7 = -10 \\ + 7 \quad + 7 \\ \hline \frac{a}{3} = -3 \\ \cdot 3 \quad \cdot 3 \\ \hline a = -9 \end{array}$$

6) $-2 = -1 + \frac{k}{14}$

$$\begin{array}{r} -2 = -1 + \frac{k}{14} \\ + 1 \quad + 1 \\ \hline -1 = \frac{k}{14} \\ \cdot 14 \quad \cdot 14 \\ \hline -14 = k \end{array}$$

8) $-1 = \frac{x}{2} - 2$

$$\begin{array}{r} -1 = \frac{x}{2} - 2 \\ + 2 \quad + 2 \\ \hline 1 = \frac{x}{2} \\ \cdot 2 \quad \cdot 2 \\ \hline 2 = x \end{array}$$

10) $-1 - 2v = 11$

$$\begin{array}{r} -1 - 2v = 11 \\ + 1 \quad + 1 \\ \hline -2v = 12 \\ \hline -2 \quad -2 \\ \hline v = -6 \end{array}$$

12) $3x + 2 = 5$

$$\begin{array}{r} -2 \quad -2 \\ \hline 3x = 3 \\ \hline 3 \quad 3 \\ \hline x = 1 \end{array}$$

14) $-6 = k - 2 - 5$

$$\begin{array}{r} -6 \pm k - 7 \\ + 7 \quad + 7 \\ \hline 1 = k \end{array}$$
 COMBINE LIKE TERMS first!

16) $-7a - 4a = 11$

$$\begin{array}{r} -11a = 11 \\ -11 \quad -11 \\ \hline a = -1 \end{array}$$
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18) $1 = 6p + 6 - p$

$$\begin{array}{r} 1 = 5p + 6 \\ -6 \quad -6 \\ \hline -5 = 5p \\ \hline -1 = p \end{array}$$
 CLT

20) $1.5x + 4 = -2.8$

$$\begin{array}{r} -4 \quad -4 \\ \hline 1.5x = -6.8 \\ \hline 1.5 \quad 1.5 \\ \hline x = -4.6 \end{array}$$