

More Practice Solving Linear Equations

Directions: Solve each equation. Copy an equation on lined paper, then solve it by working down. Circle, box or underline the answer. Then copy the next problem below it. Continue for all 16 problems.

① $5x + 9 = 2$

② $7 - 6d = 3$

③ $\frac{1}{3}y - 2 = 4$

④ $16 = 5 - \frac{1}{8}n$

⑤ $3(5x - 4) = 8x + 2$

⑥ $9(n + 3) = 7n - 3$

⑦ $2(10 - 6x) = x - 8x$

⑧ $5a + 4(3a - 8) = 4 + 13a$

⑨ $2y + 18 = 12 - 6(y + 7)$

⑩ $x - (5 - 3x) = 7x + 4$

⑪ $8(m - 5) = 2(3m - 8)$

⑫ $-4(3 - 6d) = 9(2d - 2)$

⑬ $|x + 2| = 7$

⑭ $|3x - 6| = 15$

⑮ $|9 + 4x| = 1$

⑯ $|20 - 7x| = 8$

Examples:

<p>Like 1-4:</p> $\frac{x}{7} + 4 = -8$ $\begin{array}{r} \frac{x}{7} + 4 \\ -4 \quad -4 \\ \hline \frac{x}{7} \end{array} = -12$ $\frac{x}{7} \times 7 = -12 \times 7$ $\underline{x = -84}$	<p>Like 5-12:</p> $7(10 - 3w) = 5(15 - 4w)$ $70 - 21w = 75 - 20w$ $\begin{array}{r} 70 - 21w \\ +20w \quad +20w \\ \hline 70 - 1w = 75 \end{array}$ $\begin{array}{r} 70 - 1w \\ -70 \quad -70 \\ \hline -1w = 5 \end{array}$ $-1w / -1 = 5 / -1$ $\underline{w = -5}$
<p>Like 13-16:</p> $ 3x + 18 = 6$ <p>First, split the equation into two equations without the </p> $3x + 18 = -6 \quad \text{or} \quad 3x + 18 = 6$ $\begin{array}{r} 3x + 18 \\ -18 \quad -18 \\ \hline 3x = -24 \end{array} \quad \begin{array}{r} 3x + 18 \\ -18 \quad -18 \\ \hline 3x = -12 \end{array}$ $3x/3 = -24/3 \quad 3x/3 = -12/3$ $\underline{x = -8} \quad \text{or} \quad \underline{x = -4}$	