

Solving Two-Step Equations

I. Using Inverse Operations

ex:

Be working w/ variable side

$$\begin{array}{r}
 -3x + 7 = 19 \\
 \hline
 -3x = 12 \\
 \hline
 x = -4
 \end{array}$$

Working w/ variable side

ex:

Working w/ variable side

$$\begin{array}{r}
 -5 = \frac{b}{4} + 6 \\
 -6 \\
 \hline
 (4) -11 = \frac{b}{4} \cdot 4 \\
 \hline
 -44 = b
 \end{array}$$

II. Not as Straight Forward

ex: $2 - 5x = -18$

$$\begin{array}{r} 2 - 5x = -18 \\ -5x + 2 = -18 \\ \underline{-2} \\ -5x = -20 \\ \underline{-5} \\ x = 4 \end{array}$$

ex: $-6 = +8 - \frac{4}{3}f$

$$\begin{array}{r} -6 = +8 - \frac{4}{3}f \\ -6 = -\frac{4}{3}f + 8 \\ \underline{-8} \\ (-3) -14 = \cancel{\frac{4}{3}f} \cdot \cancel{-\frac{3}{4}} \\ \boxed{42 = f} \end{array}$$