

Two-Step Equations

Balance both sides of the equation by using inverse operations to get the variable alone and find its value.

example: $8x + 3 = 35$
 $\quad \quad -3 \quad -3$

$$\frac{8x}{8} = \frac{32}{8}$$

$$x = 4$$

$$7 + \frac{y}{2} = 17$$

$$-7 \quad -7$$

$$(2) \frac{y}{2} = 10 \quad (2)$$

$$y = 20$$

* Be sure to make the same change to **both** sides of the equal sign.



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④ $\frac{d}{6} - 3 = 7$

⑤ $39 - 6e = 3$

⑥ $\frac{c}{8} + 19 = 23$

Name: _____

Basic

Two-Step Equations

⑦ $5y - 13 = 52$

⑧ $\frac{m}{3} + 8 = 20$

⑨ $4d + 4 = 40$



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⑬ $3j + 9 = 51$

⑭ $\frac{w}{8} - 5 = 4$

⑮ $9v + 3 = 39$

Two-Step Equations

$$\begin{aligned} \textcircled{1} \quad 7a + 2 &= 51 \\ -2 \quad -2 & \\ \hline 7a &= 49 \\ \frac{7a}{7} &= \frac{49}{7} \\ \hline a &= 7 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad \frac{k}{3} + 9 &= 16 \\ -9 \quad -9 & \\ \hline \frac{k}{3} &= 7 \\ (3) \frac{k}{3} &= 7(3) \\ \hline k &= 21 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad 8z - 7 &= 33 \\ +7 \quad +7 & \\ \hline 8z &= 40 \\ \frac{8z}{8} &= \frac{40}{8} \\ \hline z &= 5 \end{aligned}$$

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$$\begin{aligned} \frac{j}{3} - \frac{j}{3} &= 14 \\ \hline j &= 14 \end{aligned}$$

$$\begin{aligned} \frac{w}{8} - \frac{w}{8} &= 72 \\ \hline w &= 72 \end{aligned}$$

$$\begin{aligned} \frac{v}{9} + \frac{v}{9} &= 4 \\ \hline v &= 4 \end{aligned}$$