

Literal Equations

5 Solve for w .

$$P = 2\ell + 2w$$

6 Solve for b .

$$A = \frac{1}{2}bh$$

To solve a literal equation for one variable, use _____.

What is a literal equation?

A literal equation is _____

⑦ Solve for ℓ .

$$S = \pi r \ell + \pi r^2$$

⑧ Solve for w .

$$S = \frac{w - 10e}{m}$$

Two-Step Equations

Recall: Solve for x .

$$x + 7 = -12$$

① Solve for a .
 $a + b = c$

Recall: Solve for y .

$$y - 9 = 34$$

② Solve for d .
 $d - e = f$

Recall: Solve for x .

$$-6x = -30$$

③ Solve for r .
 $C = 2\pi r$

Recall: Solve for y .

$$\frac{y}{-4} = 8$$

④ Solve for m .
 $D = \frac{m}{v}$

One-Step Equations

Literal Equations

5 Solve for w.

$$P = 2\ell + 2w$$

$$\begin{array}{r} - 2\ell \quad - 2\ell \end{array}$$

$$\frac{P - 2\ell}{2} = \frac{2w}{2}$$

$$\frac{P - 2\ell}{2} = w$$

6 Solve for b.

$$2 \cdot A = \frac{1}{2}bh \cdot 2$$

$$\frac{2A}{h} = \frac{bh}{h}$$

$$\frac{2A}{h} = b$$

To solve a literal equation for one variable, use inverse operations.

Addition & Subtraction
Multiplication & Division
Squares & Square Roots

What is a literal equation?

A literal equation is an equation
with two or more variables.

⑦ Solve for ℓ .

$$S = \pi r \ell + \pi r^2$$

$$\begin{array}{cc} -\pi r^2 & -\pi r^2 \\ \hline S - \pi r^2 = \pi r \ell & \pi r \ell \end{array}$$

$$\frac{S - \pi r^2}{\pi r} = \ell$$

⑧ Solve for w .

$$m \cdot S = \frac{w - 10e}{m} \cdot m$$

$$\begin{array}{cc} Sm = w - 10e \\ + 10e & + 10e \end{array}$$

$$Sm + 10e = w$$

Two-Step Equations

Recall: Solve for x .

$$x + 7 = -12$$

$$\begin{array}{cc} -7 & -7 \\ \hline x = -19 \end{array}$$

① Solve for a .

$$a + b = c$$

$$\begin{array}{cc} -b & -b \\ \hline a = c - b \end{array}$$

Recall: Solve for y .

$$y - 9 = 34$$

$$\begin{array}{cc} +9 & +9 \\ \hline y = 43 \end{array}$$

② Solve for d .

$$d - e = f$$

$$\begin{array}{cc} +e & +e \\ \hline d = f + e \end{array}$$

Recall: Solve for x .

$$-6x = -30$$

$$\begin{array}{cc} -6 & -6 \\ \hline x = 5 \end{array}$$

③ Solve for r .

$$\frac{C}{2\pi} = \frac{2\pi r}{2\pi}$$

$$\frac{C}{2\pi} = r$$

Recall: Solve for y .

$$-4 \cdot \frac{y}{-4} = 8 \cdot -4$$

$$y = -32$$

④ Solve for m .

$$V \cdot D = \frac{m}{V} \cdot V$$

$$Dv = m$$

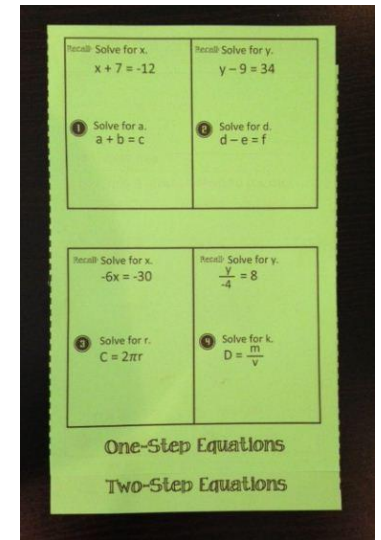
One-Step Equations

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Directions

Step 1: Print pages 1 & 2 front to back. Flip along the long edge.

Step 2: Cut along the dotted line, creating two half strips of paper.
Line up the bottom of the pages as shown.



Step 3: Fold over the top portion of both sheets and secure with a few staples.

The final product should look like this:

