

3.2 : 2-Step Equations

$$\frac{x}{2} + 5 = 11$$

-5 -5

~~(1)~~ $\frac{x}{2} = 6(2)$

$x = 12$

operation performed	inverse
1. divided by 2	1. subtract 5
2. add to 5	2. multiply by 2

$$5x + 9 = 36$$

-9 -9

~~5~~ $x = \frac{27}{5}$

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$5\frac{2}{5}$

$$\begin{array}{r} -1 \\ +7 \end{array} = \frac{z}{3} - \begin{array}{r} 7 \\ +7 \end{array}$$

$$(3) 6 = \frac{z}{3} (3)$$

$$\textcircled{18 = z}$$

$$\begin{array}{r} 4y - 4 \\ +4 \end{array} = \begin{array}{r} 16 \\ +4 \end{array}$$

$$\begin{array}{r} 4y \\ 4 \end{array} = \frac{20}{4}$$

$$\textcircled{y = 5}$$

$$4x + 2x = 18$$

$$\frac{6x}{6} = \frac{18}{6}$$

$$x = 3$$

output: y

input: x

$5x$

The output of a function is 3 less than 5 times the input. Find the input when the output is 17

$$y = 5x - 3$$

$$17 = 5x - 3$$

$$20 = 5x$$

$$x = 4$$

The output of a function is 5 more than -2 times the input. Find the input when the output is 11.

$$y = 5 + (-2x)$$

$$11 = 5 + (-2x)$$

$$\frac{6}{-2} = \frac{(-2x)}{-2}$$

$$-3 = x$$

3.2 #4-20 even
23, 24, 26,
27-35 odd
37, 46-60
even