Check with substitution… and you'll always know your answer is right!

Substitute you solution into the equation. Both sides should have the same value.

$\frac{w}{-2} = 6 \times (-2)$

$w = 6 \times (-2)$

$w = 12$

Check

Left Side	Right Side
$= \frac{w}{-2}$	6
$= \frac{-12}{-2}$	6
$+6$	$= 6$

Solve and Check:

$\frac{d}{-5} = 3 \times (-5)$

$d = 3 \times (-5)$

$d = -15$

Check

LS = RS

$\frac{d}{-5} = 3$

$\frac{-15}{-5} = 3$

$3 = 3$ ✓

$\frac{63}{7} = \frac{7p}{7}$

$\frac{63}{7} = p$

$9 = p$

Check

LS = RS

$63 = 7p$

$63 = 7(9)$

$63 = 63$ ✓

For the month of January, the average temperature in Edmonton is ⅓ the average afternoon temperature in Yellowknife. The average afternoon temperature in Edmonton is -8°C. What is the average temperature in Yellowknife?

Let e represent Edmonton's temp.

Let y represent Yellowknifes temp.

$e = \frac{1}{3} \times y$

$e = \frac{y}{3}$

$\times 3 \quad \times 3$

$-8 = \frac{y}{3}$

$-8 \times 3 = y$

$-24 = y$

The temperature in yellow knife is $-24\,^{\circ}C$.

Check

LS = RS

$-8 = \frac{y}{3}$

$\frac{-24}{3} = -8$

$-8 = -8$ ✓

Practice:

$\frac{-8x}{-8} = \frac{16}{-8}$

$x = -2$

$\frac{36}{18} = \frac{18x}{18}$

$2 = x$

$\frac{1}{1} \times 3 = \frac{15}{y} \times y$

$\frac{3y}{3} = \frac{15}{3}$

$y = 5$

$\frac{y}{-36} \times 36 = -3 \times 36$

$y = 108$