

Proportion

A **proportion** is a statement that two ratios are equal.

$$\frac{a}{b} = \frac{c}{d}$$

$$a : b = c : d$$

Determine the **means** and **extremes** for the following **proportions**

$$\frac{2}{x} = \frac{4}{y}$$

$$3 : a = 6 : b$$

$$\frac{m}{6} = \frac{4}{n}$$

$$k : 4 = 2 : l$$

Given the proportion...

$$\frac{a}{b} = \frac{c}{d}$$

The following are equivalent statements.

1) $ad = bc$

2) $\frac{b}{a} = \frac{d}{c}$

3) $\frac{d}{c} = \frac{b}{a}$

4) $\frac{a+b}{b} = \frac{c+d}{d}$

Given the proportion...

$$\frac{4}{7} = \frac{x}{y}$$

Create four equivalent statements

1)

multiply means
and extremes

2)

flip numerators
with denominators

3)

switch means
and extremes

4)

add denominator
value to numerator