

39.

$$\frac{5m}{10} - \frac{2m}{10} + \frac{m}{2} + 3 = \frac{m}{5} + 5 - \frac{m}{5}$$

$$\frac{1}{2}m - \frac{1}{5}m + \frac{3m}{10} + 3 = 5 - 3$$

$$\frac{10}{3} \cdot \frac{3m}{10} = 2 \cdot \frac{10}{3}$$

$$m = \frac{20}{3}$$

4.1

Proportion

$$\frac{1}{2} = \frac{5}{10}$$

Ratios
set equal

$$\frac{1}{2} = \frac{3}{6}$$

$$\frac{1}{2} = \frac{x}{18}$$

$$\frac{1}{2} = \frac{x}{18}$$

$$\frac{2x}{2} = \frac{18}{2}$$

$$x = 9$$

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~~$$\frac{1}{2} = \frac{x}{18}$$~~

$$\frac{2x}{2} = \frac{18}{2}$$

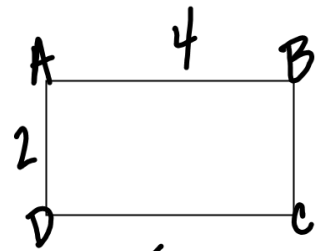
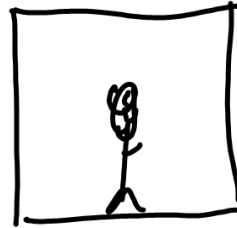
$$x = 9$$

$$1:2 = 9:18$$

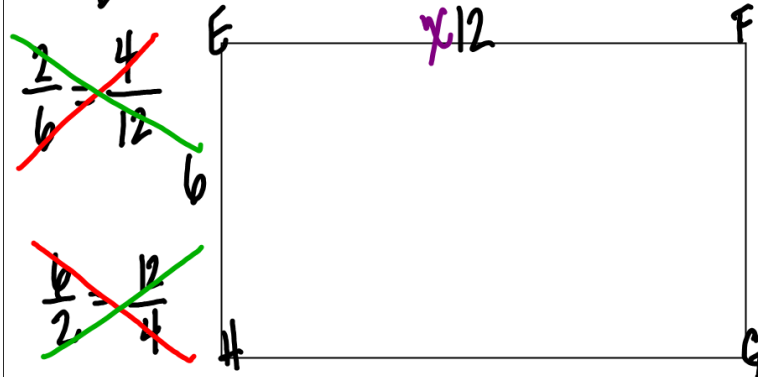
means
extremes

~~$$\frac{1}{2} = \frac{9}{18}$$~~

The product of the means is
equal to the product of the extremes.



$$\frac{2}{4} = \frac{6}{12}$$



$ABCD \sim EFGH$
Similar

\angle 's \cong congruent sides in proportion

$$\frac{1}{2}$$

$$\frac{1}{2}$$

$$\frac{27}{18} = \frac{42}{x}$$

~~$$\frac{3}{2} = \frac{42}{x}$$~~

$$2(42) = 3x$$

$$\frac{84}{3} = \frac{3x}{3}$$

$$28 = x$$

~~$$\frac{21.5}{x} = \frac{64.5}{18}$$~~

$$x = 6$$

$$\frac{x}{12} = \frac{21}{63}$$

~~$$\frac{x}{12} = \frac{1}{3}$$~~

$$\frac{3x}{3} = \frac{12}{3}$$

$$x = 4$$

~~$$\frac{15}{9} = \frac{35}{21}$$~~

$$\frac{15}{9} = \frac{35}{21}$$

$$\frac{5}{3} = \frac{35}{21}$$

~~$$\frac{5}{3} = \frac{5}{3}$$~~

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$$\frac{3}{2} = \frac{42}{28}$$

$$\frac{3}{2} = \frac{6}{4}$$

$$\frac{3}{2} = \frac{3}{2}$$