

Algebra I

3-6

Solving Proportions

Proportion -

Means and Extremes Theorem of Proportionality:

Given the following proportion:

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

Write 3 equivalent forms of the above proportion:

1) $\frac{a}{b} = \frac{c}{d} \Rightarrow$

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

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

Solve.

1) $\frac{21}{8x} = \frac{7}{4}$

2) $\frac{6}{x} = \frac{3}{x-2}$

Solve.

$$3) \frac{4x+5}{2x+7} = \frac{5}{7}$$

$$5) \frac{5}{8} = \frac{1-y}{3+2y}$$

- 6) An architect creates a scale model of a school. The school is 50 ft high. The ratio of the model to the actual school is 1 foot to 75 feet. Estimate the height of the model.

Assignment:

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4-14 even,

15-18,

19-29 odd,

32-43 all

! Show all steps on multiple choice and word problems. !