

3.6: "Solve Ratios and Proportions"

"I WILL ...

Solve Proportions using Cross Multiplication/Product."

I. Steps

- A. If the question is written as a fraction, think of "cross-multiply butterfly"
- B. Simplify the equation
- C. Solve
- D. Check

II. Problem Solving

- A. Write the proportion by rewriting it this way, $\frac{\textit{is}}{\textit{of}} = \frac{\textit{part}}{\textit{whole}}$
- B. Simplify
- C. Solve and label
- D. Check

III. Model Problems

Ex 1: Solve $\frac{8}{x} = \frac{6}{15}$	Ex 2: Solve $\frac{3}{x} = \frac{6}{x-1}$
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<p>Ex 3: Solve $\frac{3}{x} = \frac{2}{x-6}$</p>	<p>Your Turn: Solve $\frac{x}{5} = \frac{x-6}{4}$</p>
<p>Ex 4: Each day, the seals at an aquarium are each fed 8 pounds of food for every 100 pounds of their body weight. A sea at the aquarium weighs 280 pounds. How much food should the seal be fed per day?</p>	<p>Ex 5: Little Suzy is making her own potting soil. For every 4 buckets of moss, she mixes in 3 buckets of fertilizer. Suppose she uses 10 buckets of moss, how many buckets of fertilizer will she use?</p>