

By the end of this lesson you will be able to _____.

Example 1 - Solve for the missing value in the proportion

What is a *proportion*? _____

1) Show your work for solving the proportion using a common factor.

$$\frac{6}{7} = \frac{x}{21}$$

What can you do?

2) How can you use *cross-products* to help solve for the missing value?

$$\frac{8}{6} = \frac{15}{x}$$

Example 2 - A toy company performs a safety check before shipping out their toys. The check found _____ defective toys for every _____ inspected. If the company inspected _____ toys, how many of them were defective?

What two units are being compared in the problem?

How can you set up a proportion to show the ratios are equal?

[Show your work for solving the proportion using a common factor]

How many toys were defective? Write your answer in a complete sentence.

Example 3 - A movie critic stood outside from a new release asking the theatre patrons what they thought about the movie. _____ out of _____ people enjoyed the movie. If he found that _____ people enjoyed the movie, how many people did he survey?

What two units are being compared in the problem?

How can you set up a proportion to show the ratios are equal?

[Show your work for solving the proportion using a common factor]

How many people were surveyed? Write your answer in a complete sentence.

Your Turn to Practice

Copy each proportion from the video and solve by using the common factor.

1)

2)

Copy the question for each problem from the video. Determine the solution to each question by setting up a proportion and using cross products to create and solve an equation. Provide your answer in a complete sentence.

3) James is driving across the country for a job interview. He figures he can drive 400 miles a day. _____

4) Melissa's History exam had 75 questions on it. She was only able to answer 66 questions in the allotted time. Assuming that she answered them all correctly, what is the highest grade possible she could get? _____
