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## NOTES: Section 11.1 - Proportions

Goals: \#1-I can solve proportions using cross multiplication.


## Homework: Section 11.1 Worksheet

Exploration \#1: Work with a partner and answer the following questions.

1. Find the value of $x$ that would make the following equivalent fractions.
a. $\frac{1}{2}=\frac{x}{8}$
b. $\frac{10}{x}=\frac{5}{6}$
c. $\frac{x}{9}=\frac{1}{3}$

## Notes:

An equation that states that two $\qquad$ are equal is a $\qquad$ .

## Example:

If two $\qquad$ are equal, then their $\qquad$ are also equal.

## Example:

To $\qquad$ proportions, we will $\qquad$ .

Example \#1: Solve the proportion.

1. $\frac{3}{y}=\frac{5}{8}$
2. $\frac{9}{4}=\frac{2 c}{8}$
$\qquad$
$\qquad$ Date: $\qquad$

Example \#2: Solve the proportion.

1. $\frac{3}{x}=\frac{x+1}{4}$
2. $\frac{x+3}{x+5}=\frac{x-3}{-3}$

You practice: Solve the proportion.

1. $\frac{x}{4}=\frac{x-1}{x}$
2. $\frac{x}{-3}=\frac{3}{x+6}$
