Proportions

Fill in the guided notes as you watch the video in the Digital Toolbox.

- A proportion is two _____ set equal to one another.
- When a proportion contains an unknown value, it can be determined by finding the _____ .
  - This means to _____ the numerator of one ratio in the proportion by the denominator of the other ratio.

$$\frac{a}{b} = \frac{x}{y}$$

  - This results in an equation that you can use to solve for the _____ .

Example 1

Complete the example as you watch the video in the Digital Toolbox.

Solve.

$$\frac{x}{3} = \frac{7}{15}$$

Implement	Explain
	Find the cross product
	Solve for x

Example 2

Complete the example as you watch the video in the Digital Toolbox.

Solve.

$$\frac{9}{4x} = \frac{8}{3}$$

Practice

Complete the problems. Show your work.

1) $\frac{10}{21} = \frac{x}{7}$

2) $\frac{5}{12} = \frac{x}{18}$

3) $\frac{x}{8} = \frac{11}{5}$

4) $\frac{7x}{5} = \frac{13}{11}$

5) $\frac{3x}{15} = \frac{52}{5}$

6) $\frac{9}{35} = \frac{x}{75}$

Complete the problems. Show your work.

7) $\frac{x}{100} = \frac{3}{8}$

8) $\frac{2x}{15} = \frac{3}{4}$

9) $\frac{7}{15} = \frac{2}{x}$

10) $\frac{20}{x} = \frac{5}{3}$

11) $\frac{26}{5} = \frac{x}{15}$

12) $\frac{13}{3x} = \frac{1}{5}$