## Math 090 Chapter 10: PROPORTIONS Instructor: Sophia Georgiakaki

Proportions MATH FACTS pages 129 – 130

- **DEFINITION:** A proportion is a sentence that says that two ratios are equal. If the cross products are the same, the proportion is true.
- CROSS MULTIPLYING (at last)

Valid Proportions

Tell whether each proportion is true:

- $\frac{1}{2} = \frac{2}{3}$
- 6\_738
- 8 984

Finding the value of x

Solve for x:

- $\frac{3}{5} = \frac{12}{x} \qquad \qquad \frac{x}{7} = 1$  $\frac{1}{2} = \frac{x}{5} \qquad \qquad \frac{x}{4} = 0$  $\frac{x}{4} = \frac{7}{\sqrt{6.25}} \qquad \qquad \frac{x}{0.6} = \sqrt{\frac{4}{9}}$
- APPLICATIONS
  Word problems.
- SIMILAR FIGURES Maps, Plans etc.

## PREPARE FOR THE QUIZ AT HOME:

WORKBOOK pages 97 ⇔ 104 WORKBOOK Practice Quiz #10 pages 105 & 106

Proportions solve most of real life problems. There are infinite examples of quantities that are proportionally related.