

Chapter 7

Review

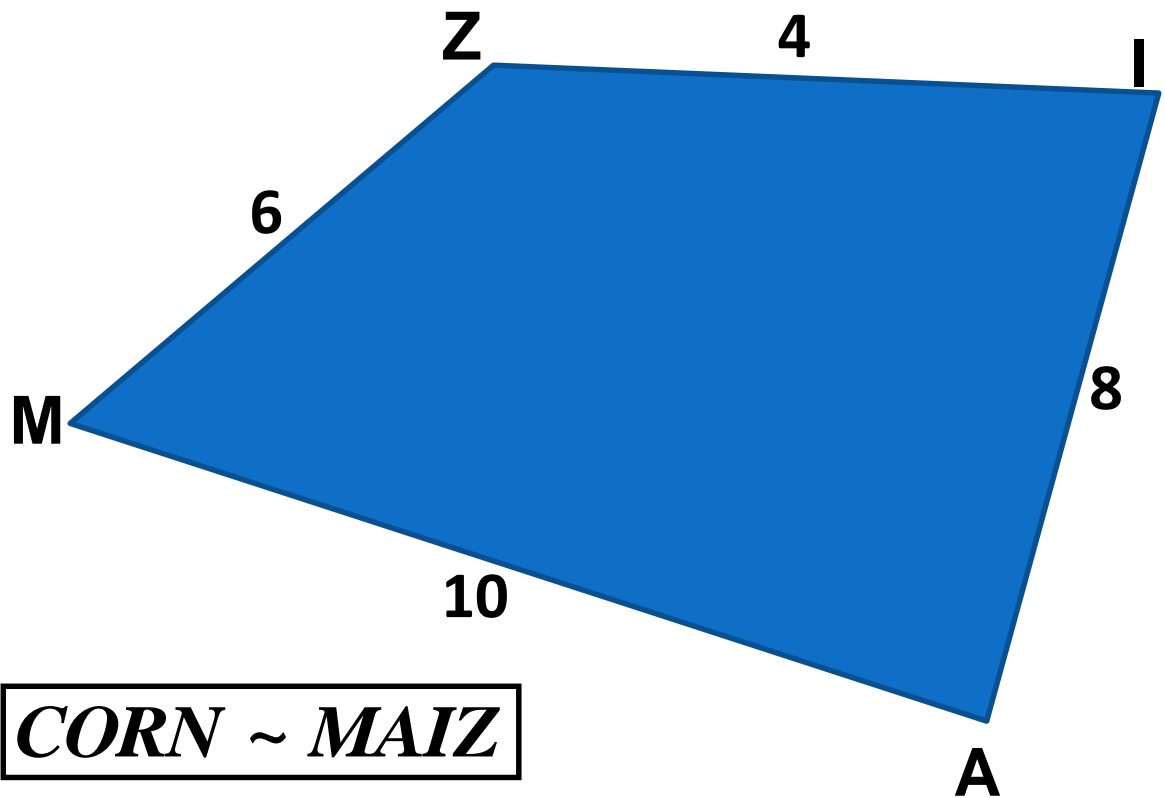
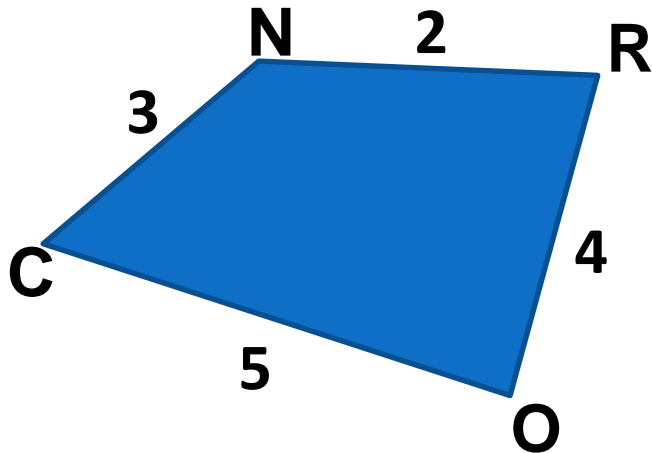
Word Problems

- 1) Jenna plants alfalfa and wheat on 160 acres on her farm. If the ratio of acres of alfalfa to acres of wheat is 3:5, how many acres of each crop are planted?

Writing Proportions

With a 5 lb bag of flour the cooking class can make 120 muffins. How many muffins can they make with a 2 lb bag of flour?

Similarity



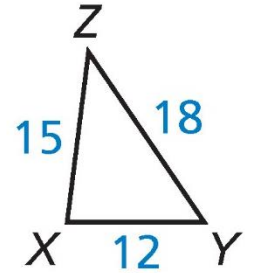
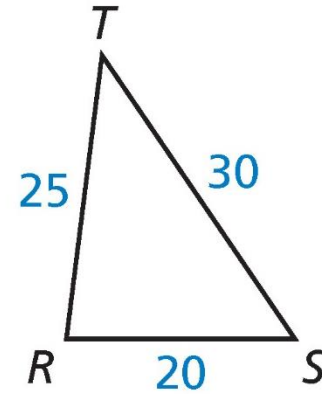
CORN ~ MAIZ

- Same shape, different size
- Corresponding angles are congruent

- Corresponding sides are proportional

In the diagram, $\triangle RST \sim \triangle XYZ$.

- a. Find the scale factor from $\triangle RST$ to $\triangle XYZ$.
- b. List all pairs of congruent angles.
- c. Write the ratios of the corresponding side lengths in a *statement of proportionality*.





POK

- **Angle-Angle Similarity Postulate**
- **Side-Side-Side Similarity Theorem**
- **Side-Angle-Side Similarity Theorem**
- **Parallel Proportionality Theorem and its Converse**
- **Extended Parallel Proportionality Theorem and its Converse**
- **Proportional Parts Theorem**
- **Parts Divided by an Angle Bisector Theorem**

Example

Helga is looking at a mirror on the ground that is reflecting the top of a flagpole. Her eye level is 168 centimeters above the ground and she is 114 centimeters from the mirror lying on the ground. The mirror is 570 centimeters from the flagpole. How tall is the flagpole?

