

2.5

Similar Figures

What are Proportions?

Proportions are EQUAL RATIOS

$$\frac{3}{5} = \frac{6}{10}$$

Cross Products

How can we tell if two ratios are proportional?

$$\frac{4}{6} = \frac{6}{9}$$

Using Cross Products to Solve Proportions

$$1) \quad \frac{x}{25} = \frac{6}{10}$$

Using Cross Products to Solve Proportions

$$2) \quad \frac{2}{9} = \frac{3}{d}$$

Using Cross Products to Solve Proportions

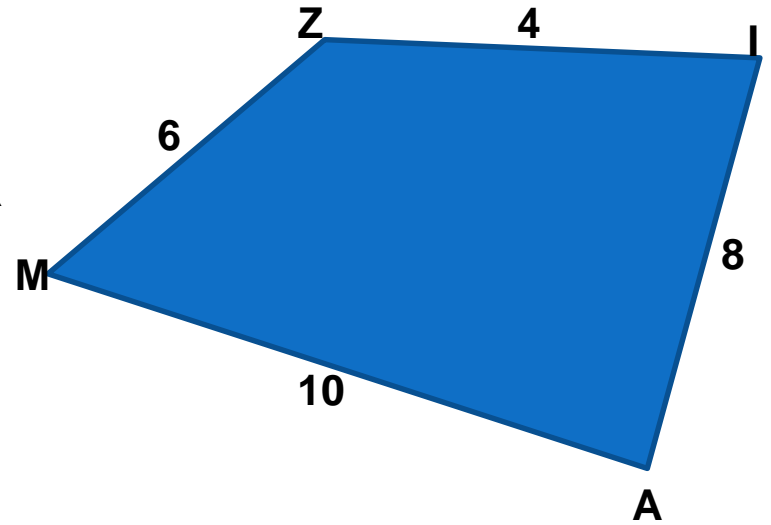
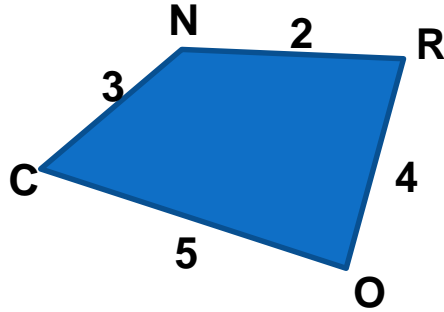
Solve for the missing variable.

$$3) \quad \frac{b}{8} = \frac{15}{20}$$

$$4) \quad \frac{10}{a} = \frac{15}{18}$$

Similarity

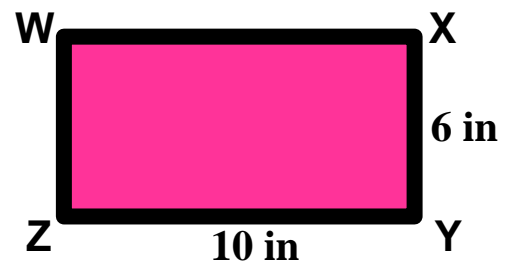
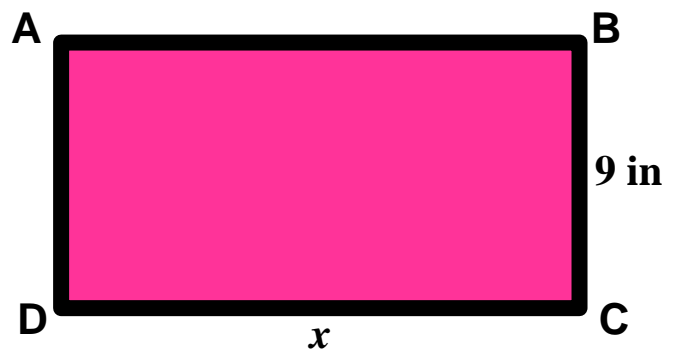
CORN ~ MAIZ



List 3 properties of similar shapes:

- _____
- _____
- _____

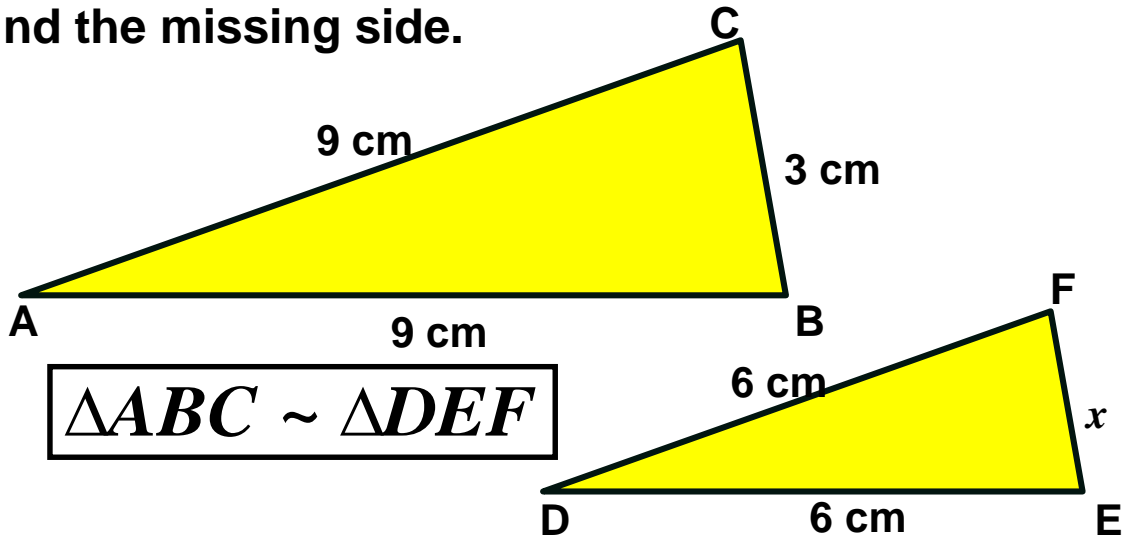
FIND MISSING SIDES



$ABCD \sim WXYZ$

PRACTICE

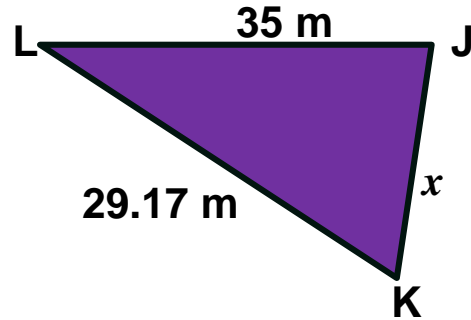
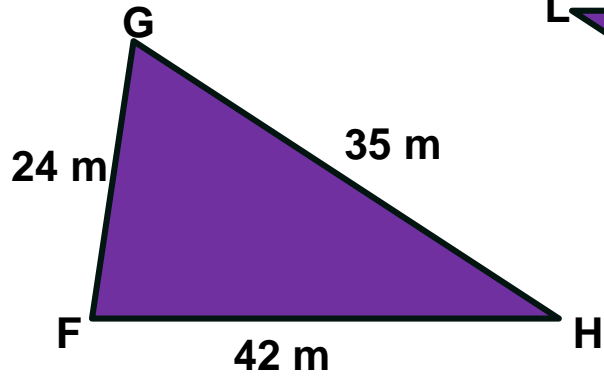
Find the missing side.



PRACTICE

Find the missing side.

$$\triangle FGH \sim \triangle JKL$$



PRACTICE

Find the missing sides.

$$\triangle BAT \sim \triangle MEN$$

