

Math 8 Notes

4.4 – Similar Figures and Proportions

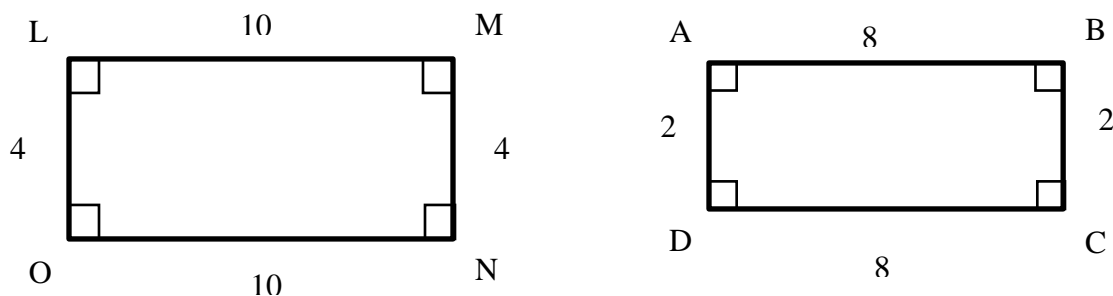
Vocabulary

Similar figures have the same shape but not necessarily the same size.

Congruent angles have equal measures.

Similar polygons have congruent corresponding angles and proportional lengths of corresponding sides.

Determining if Figures are Similar Example



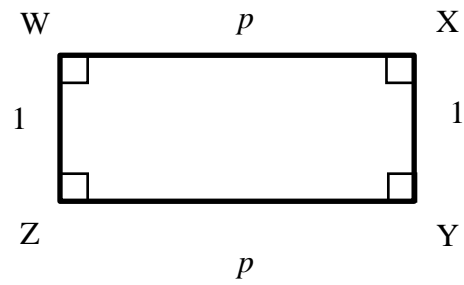
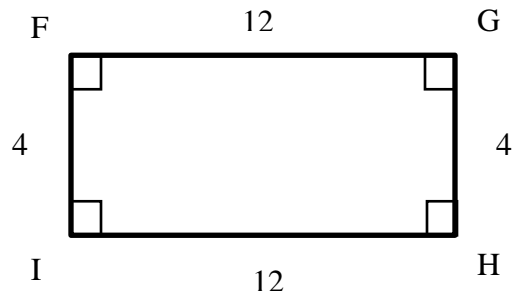
- Is rectangle $LMNO$ similar to rectangle $ABCD$? Explain.
- If sides AD and BC had a length of 3, would the rectangles be similar?

Solution

- Check that the angles are congruent.
 - Check that the corresponding sides are in proportion to each other.

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Finding an Unknown Length in Similar Figures Example



If rectangle $FGHI$ is similar to rectangle $WXYZ$, what is the length of side p ?

Solution

Tip: Similar figures that overlap can be separated so you can set up the proportion.

