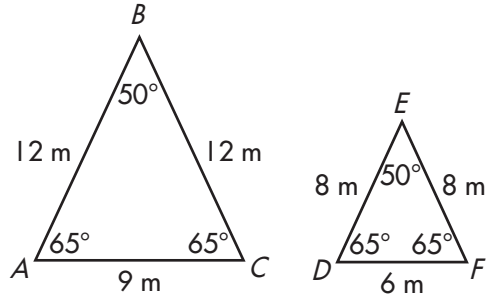
NAME _____

Lesson 5.1 Scale Drawings

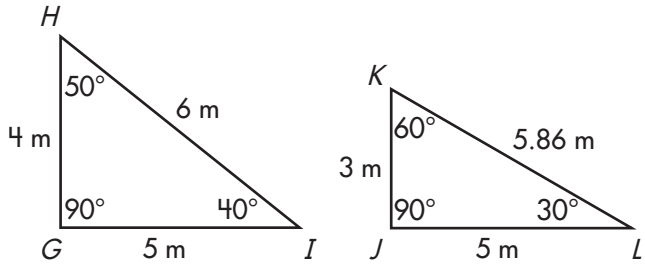
Two triangles are **similar** if their corresponding (matching) angles are congruent (have the same measure) and the lengths of their corresponding sides are proportional.



These triangles are similar. All the sides are proportional.

$\frac{AB}{DE} = \frac{12}{8} = \frac{3}{2}$ $\frac{BC}{EF} = \frac{12}{8} = \frac{3}{2}$ $\frac{AC}{DF} = \frac{9}{6} = \frac{3}{2}$

The angle measures are congruent.

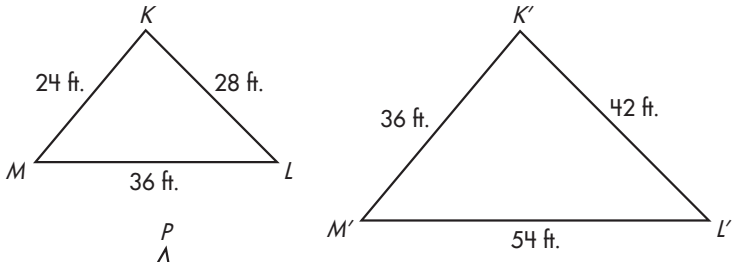


These triangles are not similar. The sides are not proportional. They do not all create the same ratio. The angle measures are not all congruent.

$\frac{GH}{JK} = \frac{4}{3}$ $\frac{HI}{KL} = \frac{6}{5.86}$ $\frac{GI}{JL} = \frac{5}{5} = \frac{1}{1}$

For each pair of triangles, check that their sides are proportional. Circle *similar* or *not similar*.

1.



$\frac{KM}{K'M'} = \_\_\_\_ = \_\_\_\_$

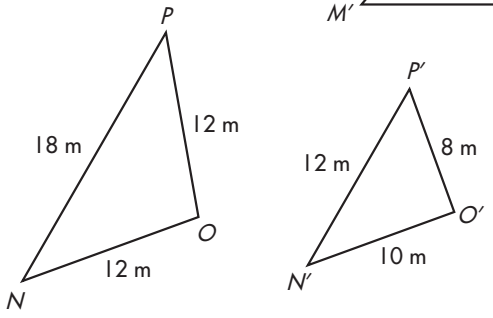
$\frac{KL}{K'L'} = \_\_\_\_ = \_\_\_\_$

similar

$\frac{ML}{M'L'} = \_\_\_\_ = \_\_\_\_$

not similar

2.



$\frac{PN}{P'N'} = \_\_\_\_ = \_\_\_\_$

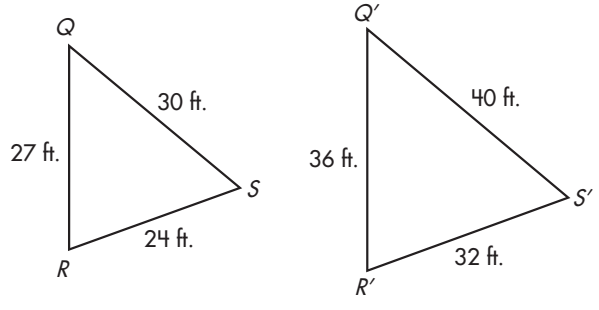
$\frac{PO}{P'O'} = \_\_\_\_ = \_\_\_\_$

similar

$\frac{NO}{N'O'} = \_\_\_\_ = \_\_\_\_$

not similar

3.



$\frac{QS}{Q'S'} = \_\_\_\_ = \_\_\_\_$

$\frac{QR}{Q'R'} = \_\_\_\_ = \_\_\_\_$

similar

$\frac{RS}{R'S'} = \_\_\_\_ = \_\_\_\_$

not similar