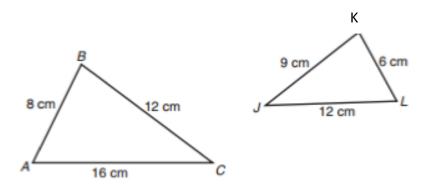
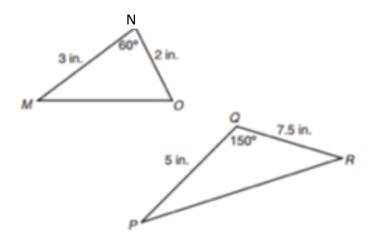
6-2 Homework: Introduction to Similarity

1. $\angle A = \angle L L$, $\angle J = \angle C$, and $\angle B = \angle K$. Determine if $\triangle ABC \cong \triangle LKJ$ and **explain why or why not**.



2. Determine if $\triangle MNO \sim \triangle QRP$ and explain why or why not.



Name:

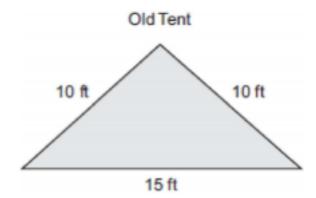
3.

A triangle has sides whose lengths are 5, 12, and 13. A similar triangle could have sides with lengths of

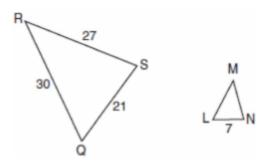
- 3, 4, and 5
- 6, 8, and 10
- 7, 24, and 25
- 10, 24, and 26

4.

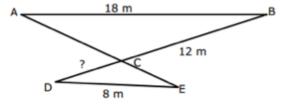
The Rivera family bought a new tent for camping. Their old tent had equal sides of 10 feet and a floor width of 15 feet, as shown in the accompanying diagram.



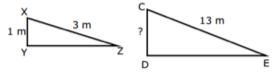
If the new tent is similar in shape to the old tent and has equal sides of 16 feet, how wide is the floor of the new tent? 5. In the accompanying diagram, $\triangle QRS$ is similar to $\triangle LMN$, RQ = 30, QS = 21, SR = 27, and LN = 7. What is the length of \overline{ML} ?



2. In the given triangles below, $\triangle ABC \sim \triangle DEC$. Find the missing length.



3. In the given triangles below, $\Delta XYZ \sim \Delta CDE.$ Find the missing length.



4. In the given triangles below, Δ HIJ ~ Δ KLM. Find the missing length.



