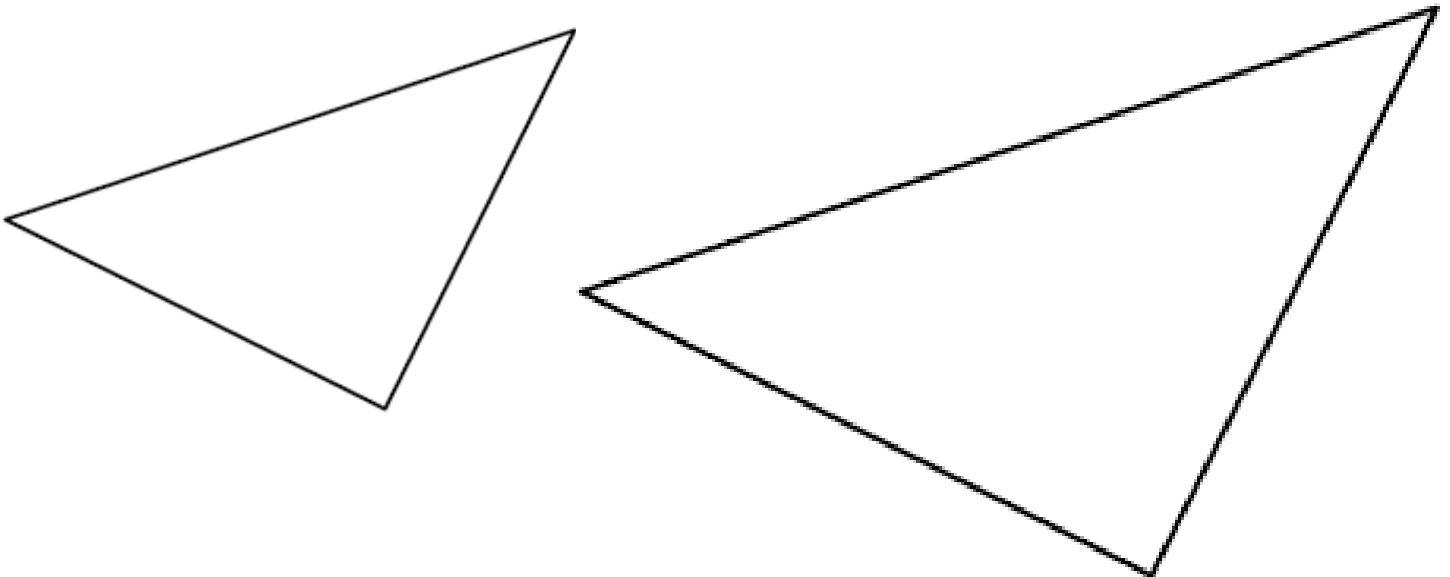


Name: _____

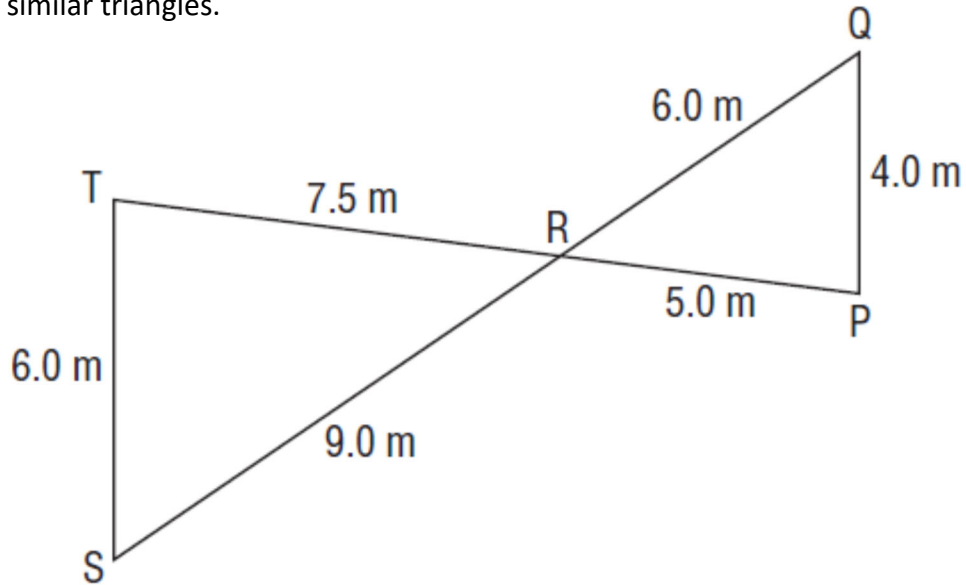
Date: _____

Learning Goal 7.3

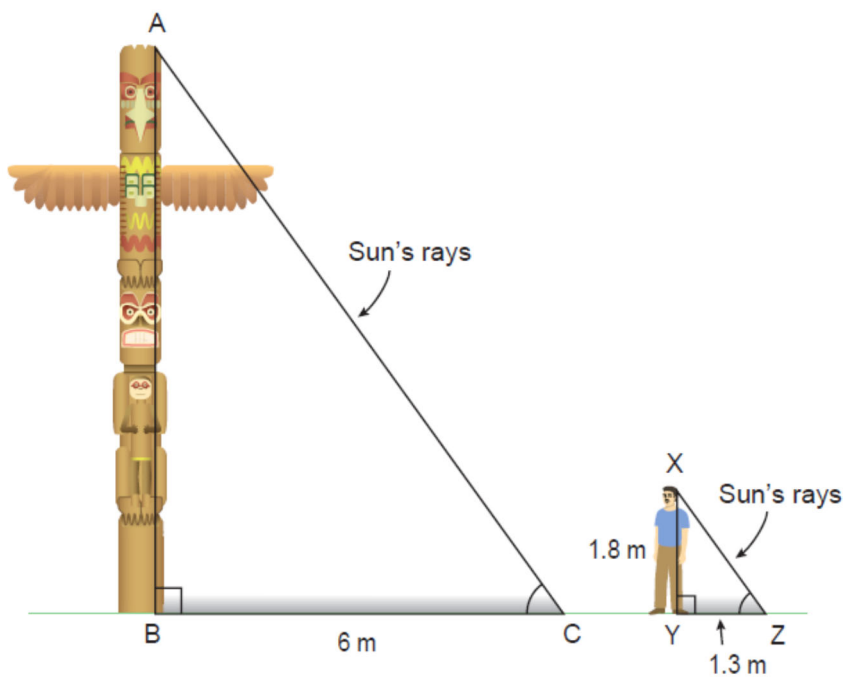
I can solve problems involving similar polygons and triangles.

Recall the criteria for polygons to be considered **similar**:

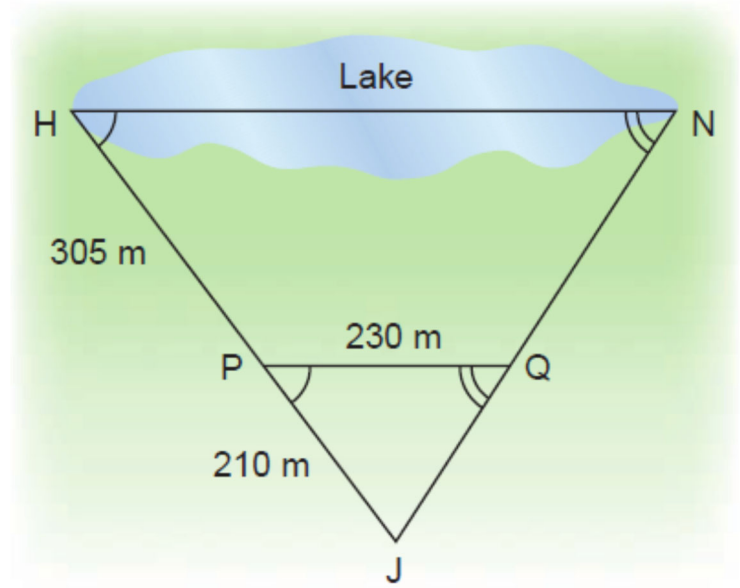
Example Identify similar triangles.



Example At a certain time of day, a person who is 1.8 metres tall has a shadow 1.3 metres long. At the same time, the shadow of a totem pole is 6 metres long. The sun's rays intersect the ground at equal angles. How tall is the totem pole, to the nearest tenth of a metre?



Example A surveyor wants to determine the width of a lake at two points on opposite sides of the lake. She measures distances and angle on land, then sketches this diagram. How can the surveyor determine the length of HN to the nearest metre?



Now, she uses this scale diagram to determine the width of the river running into the lake. The measurements she made and equal angles are shown. What is the width, AB , to the nearest tenth of a metre?

