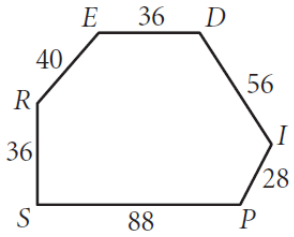
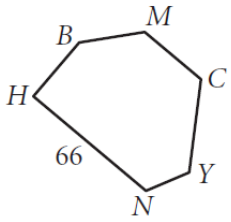
Name: _____

11a: I can identify and name similar polygons

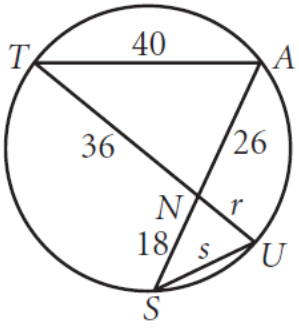
SPIDER ~ *HNYCMB*
Find *NY*, *YC*, *CM*, and *MB*.



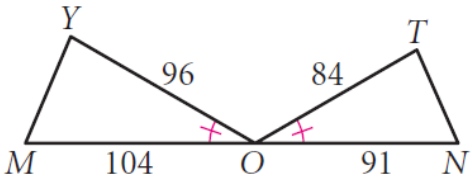


11b: I can determine if triangles are similar using the triangle shortcuts(AA,SSS and SAS)

Why is $\triangle SUN \sim \triangle TAN$?
$r =$?, $s =$?

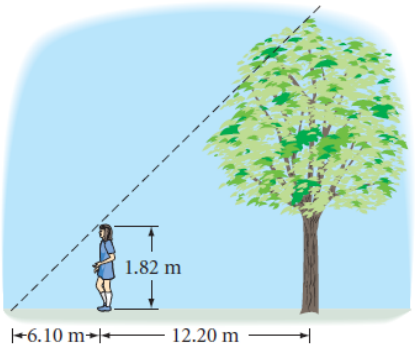


Is $\triangle MOY \sim \triangle NOT$?
Explain why or why not.

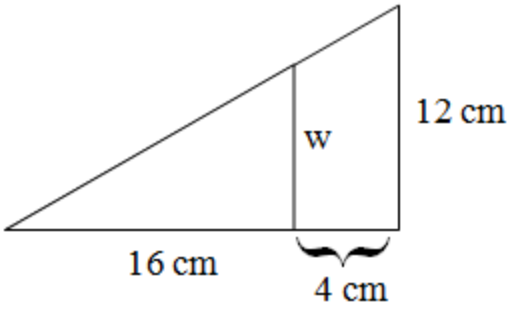


11c: I can apply the properties of similar triangles and indirect measurement to calculate unmeasurable lengths.

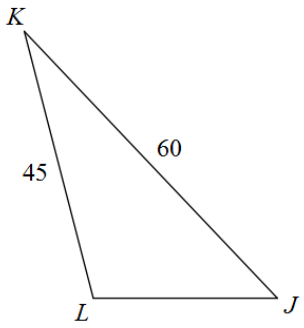
Application Juanita, who is 1.82 meters tall, wants to find the height of a tree in her backyard. From the tree's base, she walks 12.20 meters along the tree's shadow to a position where the end of her shadow exactly overlaps the end of the tree's shadow. She is now 6.10 meters from the end of the shadows. How tall is the tree?

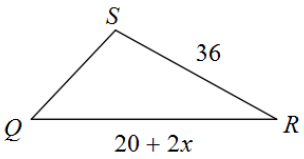


11d: I can identify the corresponding parts of similar triangles



$\triangle LKJ \sim \triangle SRQ$





11e: I can use proportions to calculate the volume and areas of similar solids.

1) The ratio between sides of two right triangles are 3:2.

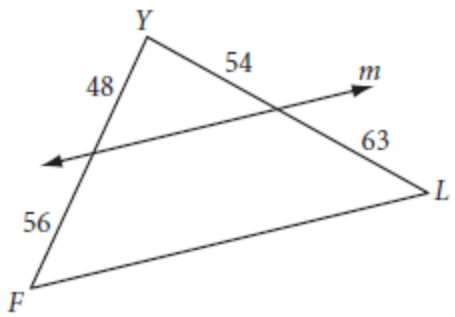
   a) What is the ratio between their perimeters?

   b) What is the ratio between their areas?

2) The ratio between two square cube's side lengths is 3:10. What is the ratio between the volumes?

11f: I can apply parallel/proportionality conjectures to determine unknown segment lengths

Is $m \parallel \overline{FL}$?



$\overline{MR} \parallel p \parallel q$

$w = \underline{?}, x = \underline{?}$