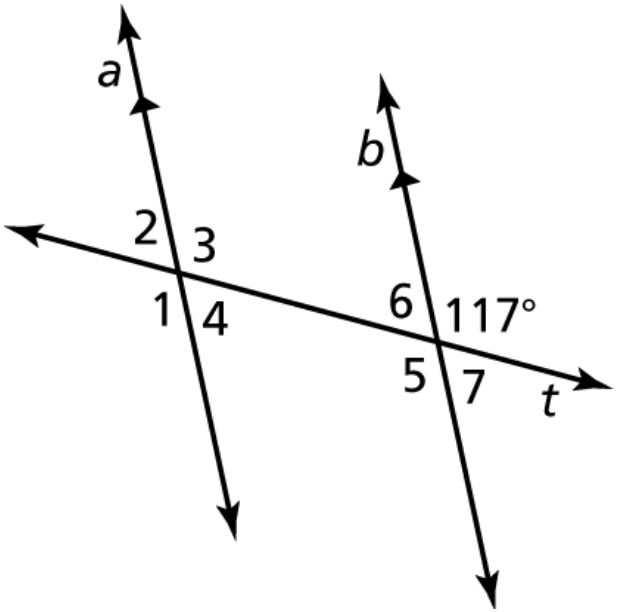
SEMESTER 1 FINAL

CHAPTER 3 REVIEW

Review

Use the figure to find the measure of the angle. Explain your reasoning.



Possible explanations:

- Vertical Angles
- Supplementary Angles
- Corresponding Angles
- Supplementary Angles
- Alternate Interior Angles
- Alternate Exterior Angles
- (Or a combination of the above)

1) $m\angle 3 =$ _____ **. Why?** _____

2) $m\angle 6 =$ _____ **. Why?** _____

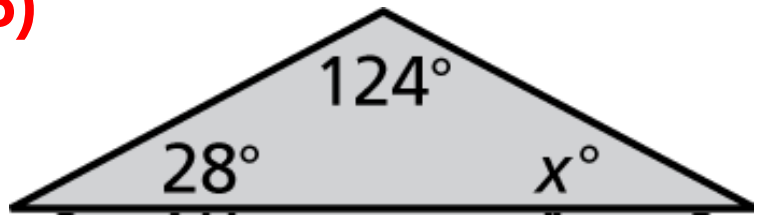
3) $m\angle 5 =$ _____ **. Why?** _____

4) $m\angle 1 =$ _____ **. Why?** _____

Review

Find the measures of the interior angles algebraically. SHOW WORK!

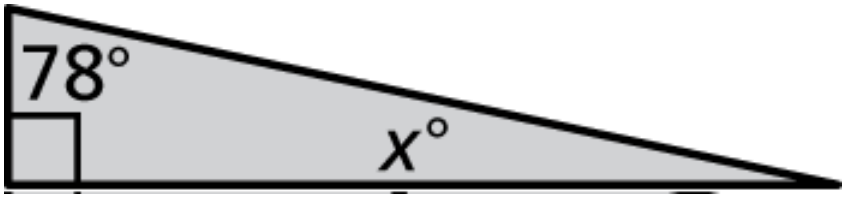
5)



Review

Find the measures of the interior angles algebraically. SHOW WORK!

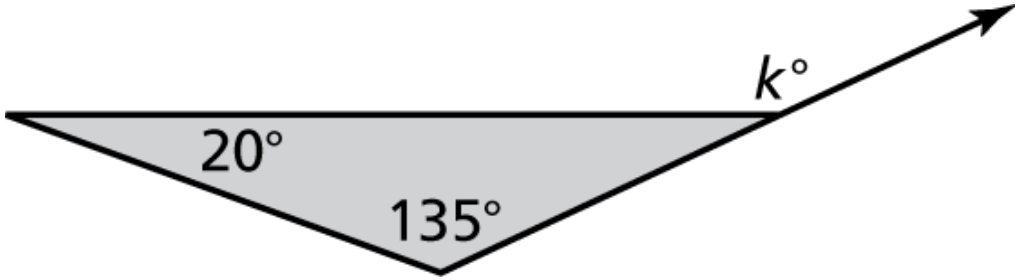
6)



Review

Find the measures of the exterior angle algebraically. SHOW WORK!

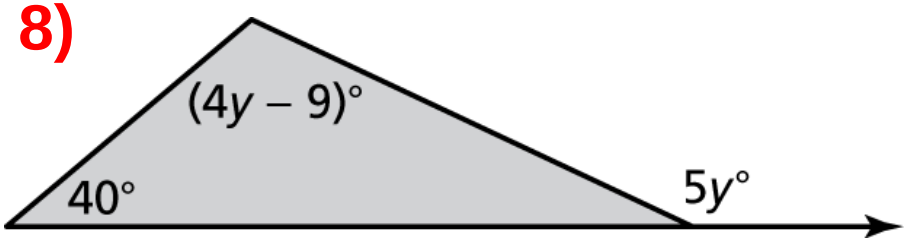
7)



Review

Find the measures of the exterior angle algebraically. SHOW WORK!

8)



Triangle Interior Angles Sum

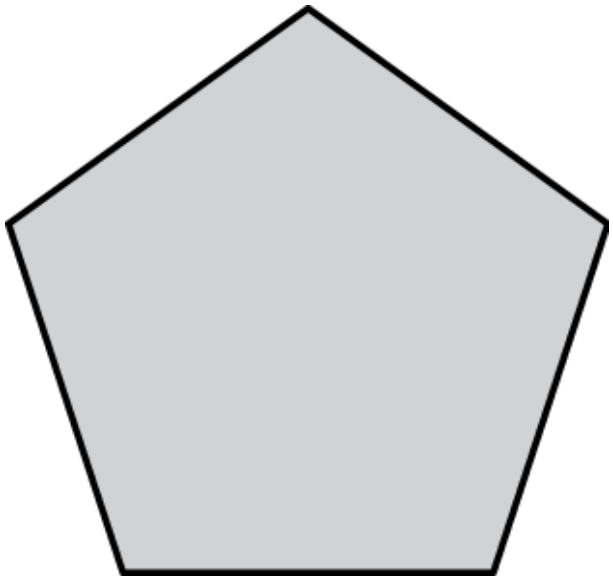
The ___ of all the _____ in a triangle is ____ .

Triangle Exterior Angle Sum

The measure of an exterior angle of a triangle is _____ to the _____ of the _____ _____ _____ .

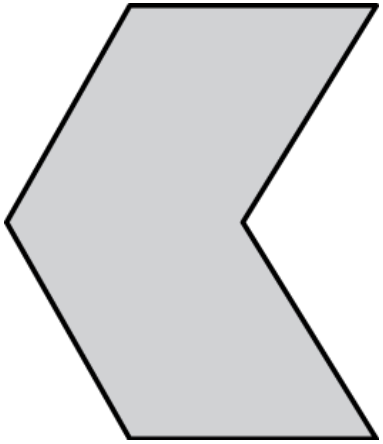
POLYGON INTERIOR ANGLES SUM

The formula to figure the sum of all the angles in a polygon with n sides is:

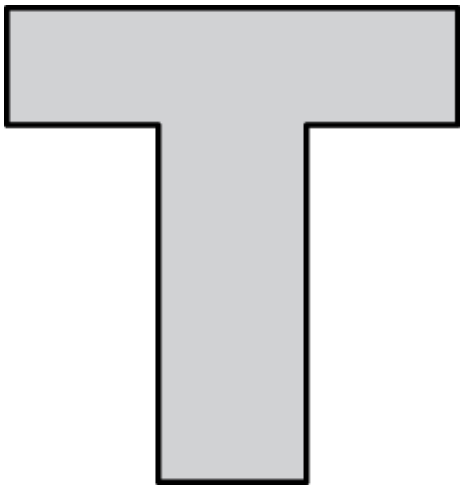


Find the sum of all the interior angles.

9)

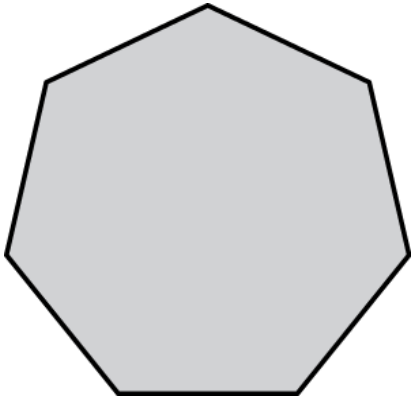


Find the sum of all the interior angles.

10) 

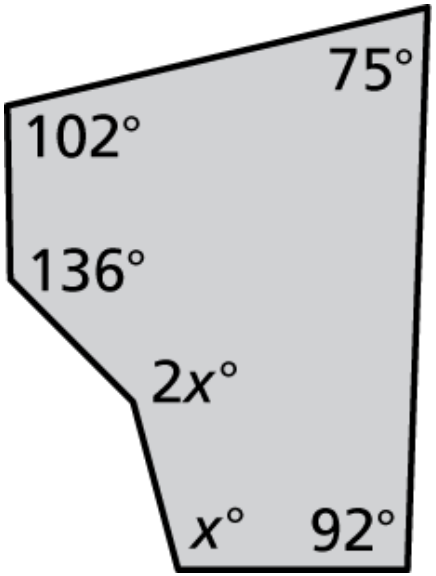
In the following regular polygon, what is the measure of one angle.

11)



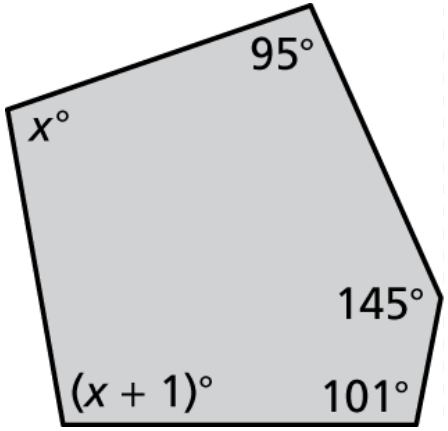
Find all the angles.

12)



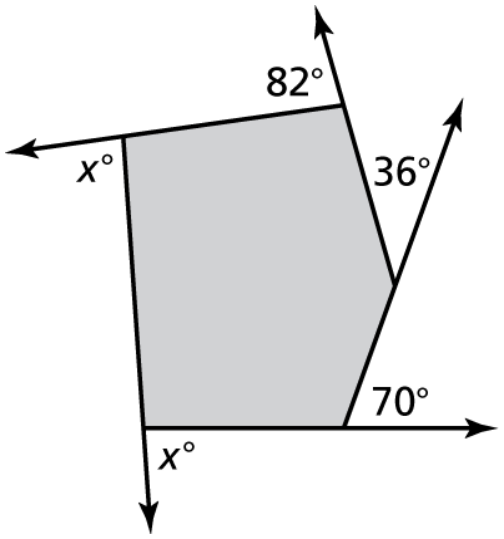
Find all the angles.

13)

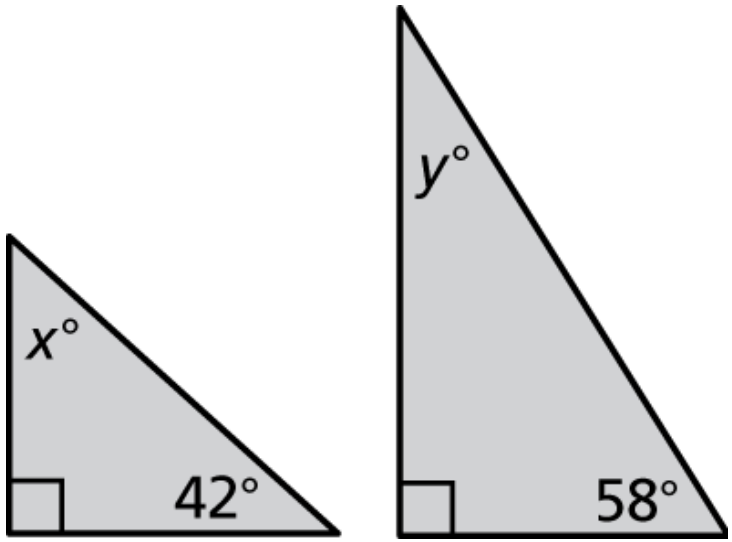


Find all the exterior angles.

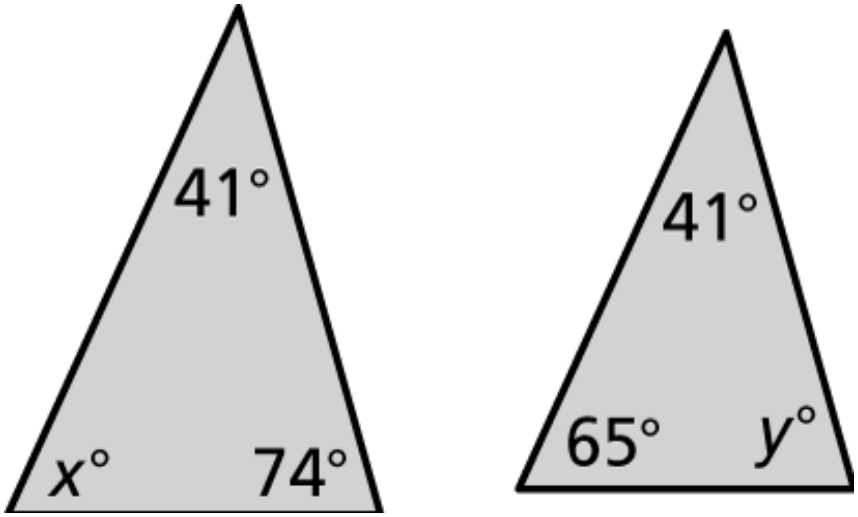
6)



8) Tell whether the triangles are similar. Explain.



9) Tell whether the triangles are similar. Explain.



10) **You and your friend are practicing for a rowing competition and want to know how far it is to an island in the Indian River Lagoon. You take measurements on your side of the lagoon and make the drawing shown.**

a) Explain why $\triangle ABC$ and $\triangle DEC$ are similar.

b) What is the distance to the island?