

Unit 4 - 4.5



### Missing Angles in a Triangle

Today's Learning Targets:

4.5 I can find missing interior and exterior angles in a triangle.

---

---

---

---

---

---

---

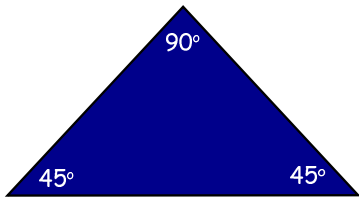
---

---

---

### Interior Angles

The sum of all three \_\_\_\_\_ in a triangle adds up to \_\_\_\_\_. **ALWAYS!**



---

---

---

---

---

---

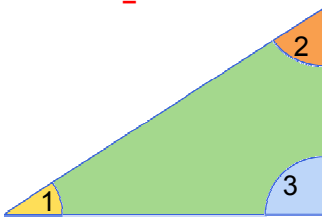
---

---

---

---

The sum of the measure of the angles of a triangle



---

---

---

---

---

---

---

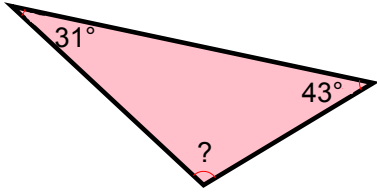
---

---

---

Unit 4 - 4.5

Find the measure of the missing angle.



Option #1

OR

Option #2

---

---

---

---

---

---

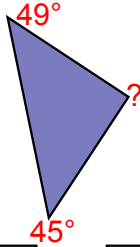
---

---

---

---

Find the measure of the missing angle.



Option #1

OR

Option #2

---

---

---

---

---

---

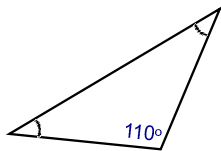
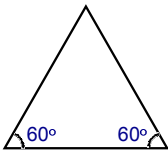
---

---

---

---

Calculate the degree of the angles in the triangles below.



---

---

---

---

---

---

---

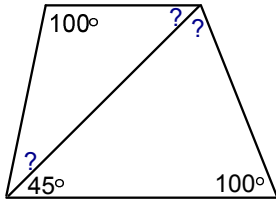
---

---

---

Unit 4 - 4.5

Calculate the degree of the angles in the triangles below.



---

---

---

---

---

---

---

---

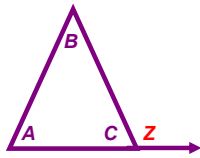
---

---

Exterior Angles

The sum of \_\_\_\_\_  
adds up to the \_\_\_\_\_.

$$\angle A + \angle B = \angle Z$$



---

---

---

---

---

---

---

---

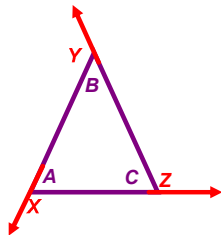
---

---

Exterior Angles

The sum of all three \_\_\_\_\_  
in a triangle adds up to \_\_\_\_\_.

$$\angle Y + \angle X + \angle Z =$$



---

---

---

---

---

---

---

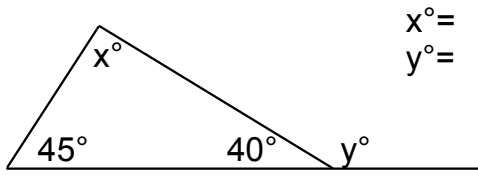
---

---

---

Unit 4 - 4.5

Find the measure of the missing angles.



$x^\circ =$   
 $y^\circ =$

---

---

---

---

---

---

---

---

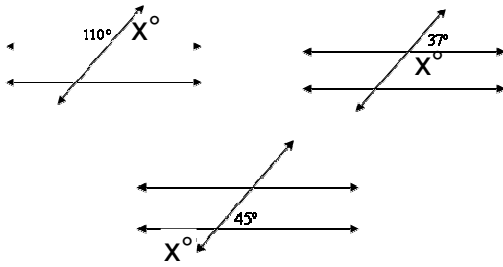
---

---

---

---

Find the measure of the missing angles.




---

---

---

---

---

---

---

---

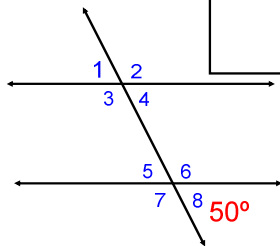
---

---

---

---

If  $m\angle 8 = 50^\circ$  find the measure of  $\angle 7$ . Be careful!  
Are the angles congruent? Why?



Why?

---

---

---

---

---

---

---

---

---

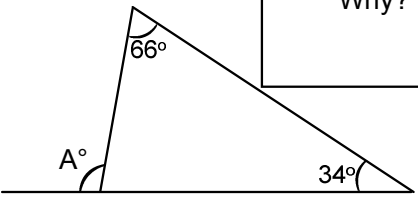
---

---

---

Unit 4 - 4.5

What is the value of  $\angle A^\circ$ ?



Why?

---

---

---

---

---

---

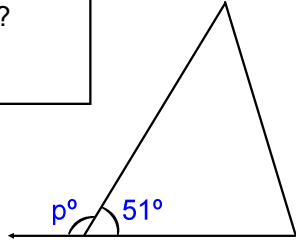
---

---

---

---

What is the value of  $\angle p^\circ$ ?



Why?

---

---

---

---

---

---

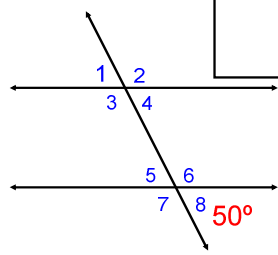
---

---

---

---

If  $m\angle 8 = 50^\circ$  find the measure of  $\angle 4$ .



Why?

---

---

---

---

---

---

---

---

---

---