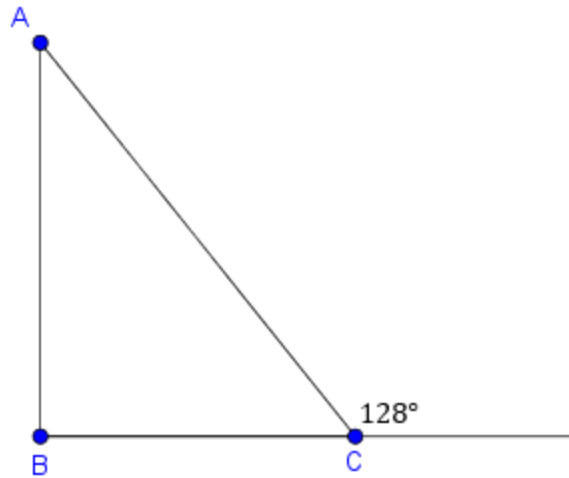


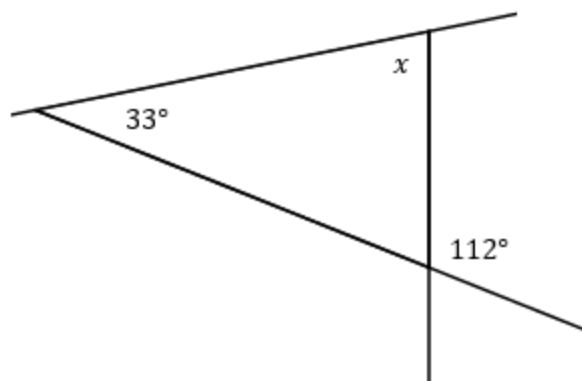
Name: \_\_\_\_\_

Date: \_\_\_\_\_

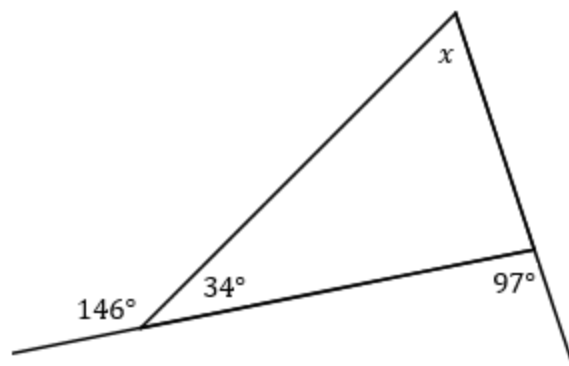
1. Triangle  $ABC$  is a right triangle. What is the measure of  $\angle A$ ?



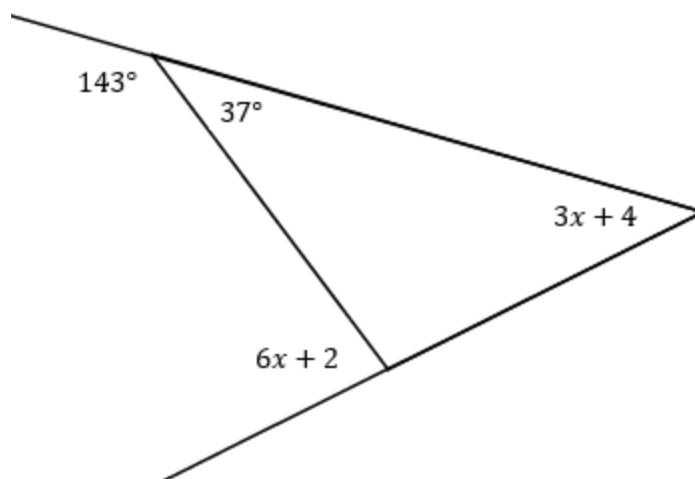
2. What is the angle measure marked by  $x$ ?



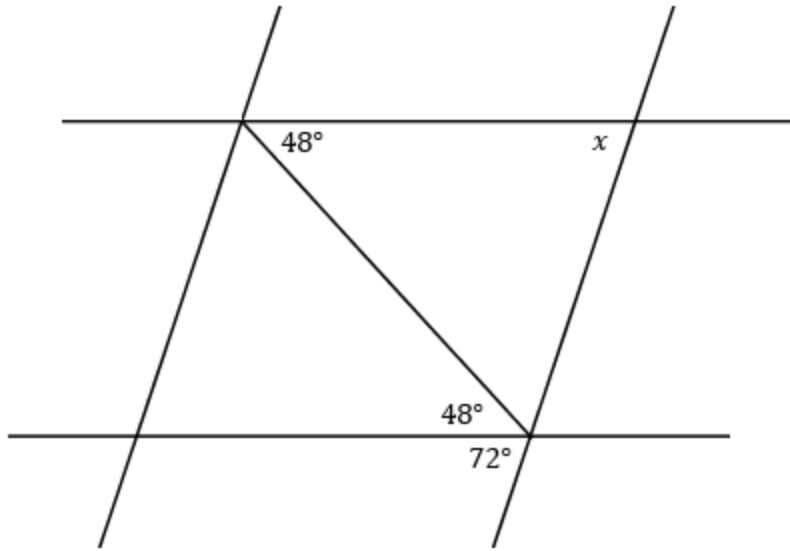
3. What is the angle measure marked by  $x$ ?



4. Solve for the value of  $x$ .



5. Alyssa is trying to determine the measure of the angle marked by  $x$  in the diagram below.

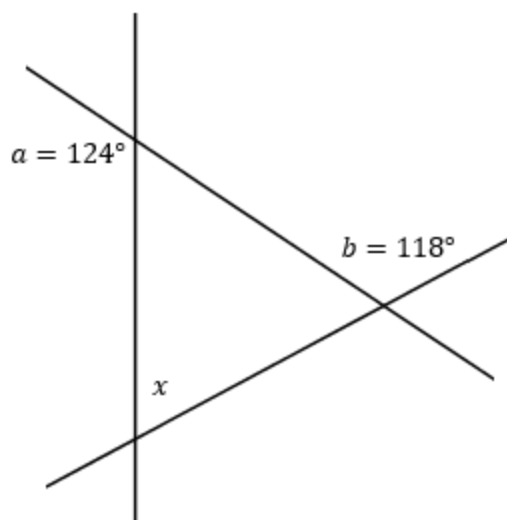


a. She sets up the equation:  $72 = 48 + x$ . Do you agree with Alyssa's equation? Why or why not?

b. What is the value of  $x$ ?

c. If you were told that the quadrilateral formed by the two pairs of lines was a parallelogram, how could you determine the value of  $x$  without using the triangle exterior angle theorem?

6. Giselle and Edward are finding the measure of the angle marked by  $x$  in the diagram below.



- Giselle says that she can use angle  $a$  as the exterior angle to find the value of  $x$ .
- Edward says that he can use angle  $b$  as the exterior angle to find the value of  $x$ .

Can both Giselle and Edward be correct? If so, find the measure of  $x$  using each of their methods.