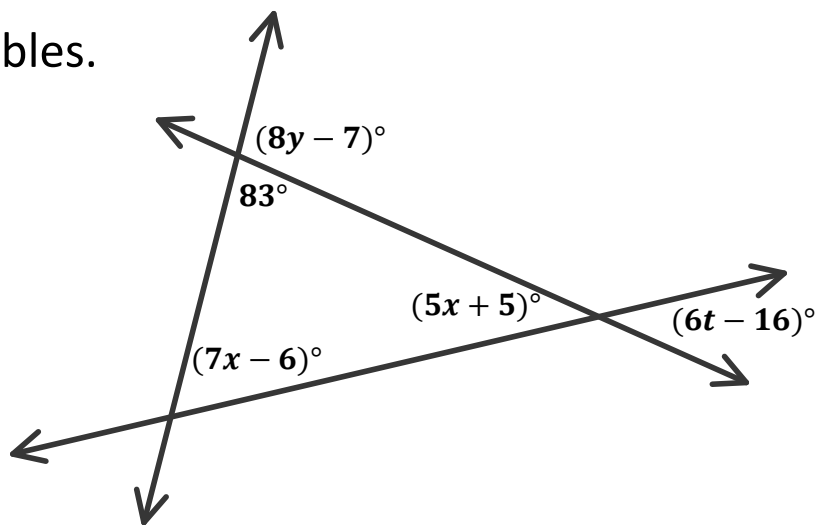


WARM UP

Solve for the variables.



ESSENTIAL QUESTION

What is true about the interior and exterior angle measures of a triangle?

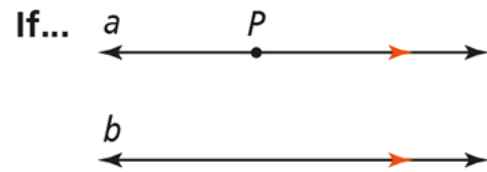
GOAL: "I CAN. . .

Solve problems using the measures of interior and exterior angles of triangles."

THEOREM 2-10

Through a point not on a line, there is one and only one line parallel to the given line.

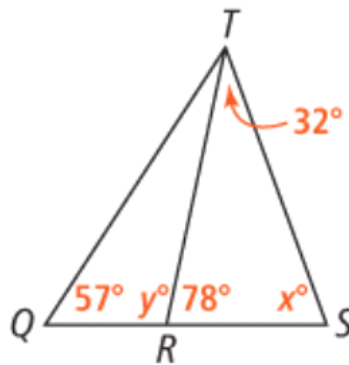
PROOF: SEE EXERCISE 10.



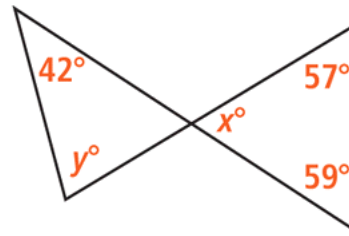
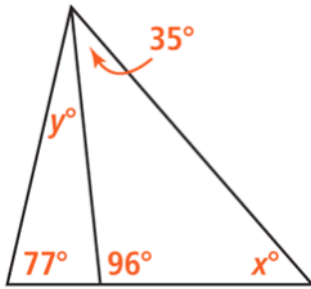
Then... line a is the only line parallel to line b through P .

EXAMPLE 1

Solve for x and y .



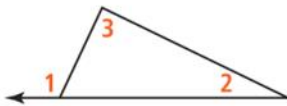
Solve for x and y . (x and y are different values for the different figures.)



Triangle Exterior Angle Theorem

The measure of each exterior angle of a triangle equals the sum of the measures of its two remote interior angles.

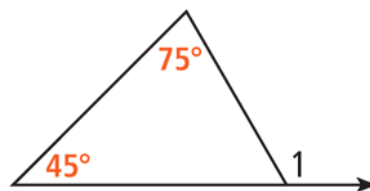
If...



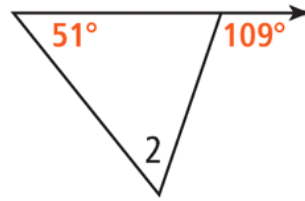
Then... $m\angle 1 = m\angle 2 + m\angle 3$

EXAMPLE 2

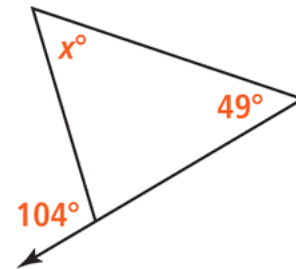
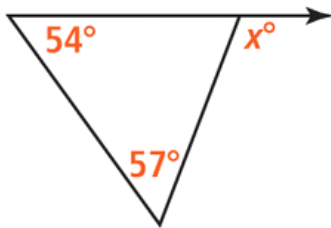
A. What is the missing angle measure in the figure?



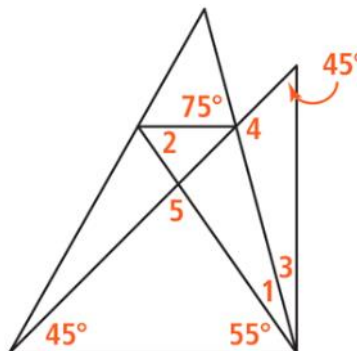
B. What is the missing angle measure in the figure?



Solve for x in each of the figures.



5. What are the measures of $\angle 4$ and $\angle 5$?
Explain.



HOMWORK

Pg. 90

12, 14, 15-27 ODD, 30, 33
