

Unit 05 - Section 03

In Exercises 3–6, find the sum of the measures of the interior angles of the indicated convex polygon.
(See Example 1.)

5. 16-gon

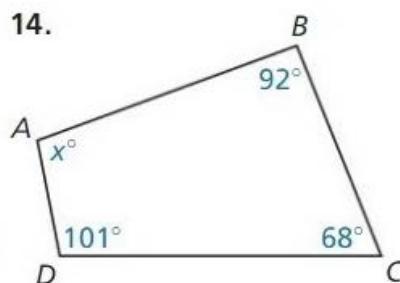
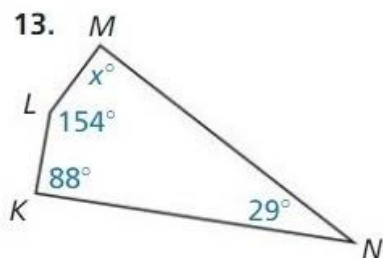
6. 20-gon

In Exercises 7–10, the sum of the measures of the interior angles of a convex polygon is given. Classify the polygon by the number of sides. (See Example 2.)

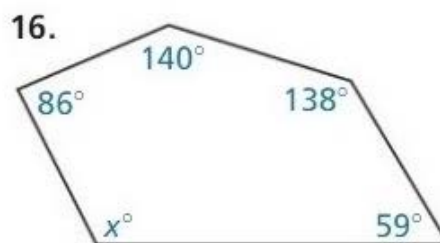
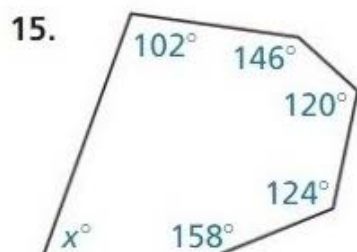
9. 2520°

10. 3240°

In Exercises 11–14, find the value of x . (See Example 3.)

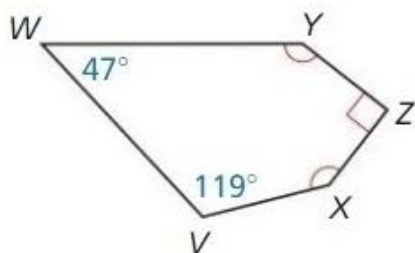


In Exercises 15–18, find the value of x .



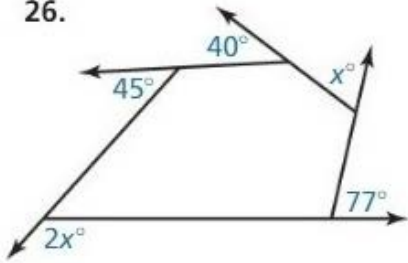
In Exercises 19–22, find the measures of $\angle X$ and $\angle Y$.

20.



In Exercises 23–26, find the value of x . (See Example 5.)

26.



In Exercises 27–30, find the measure of each interior angle and each exterior angle of the indicated regular polygon. (See Example 6.)

27. pentagon

28. 18-gon

34. **MODELING WITH MATHEMATICS** The floor of the gazebo shown is shaped like a regular decagon. Find the measure of each interior angle of the regular decagon. Then find the measure of each exterior angle.



50. **HOW DO YOU SEE IT?** Is the hexagon a regular hexagon? Explain your reasoning.

