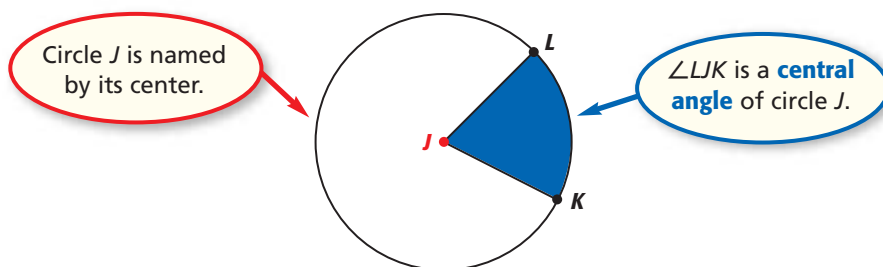


Section Overview

Circles

Lesson 8-4

Why? You need to know the parts of a circle to construct and interpret a circle graph and to find the circumference and area of a circle.



Find the measure of the central angle if the sector is 20% of the circle.

The sum of the measures of all the central angles of a circle is 360° .

$$\begin{aligned} \text{central angle measure} &= 20\% \text{ of } 360^\circ \\ &= (0.20) \cdot 360 = 72^\circ \end{aligned}$$

Polygons

Lessons 8-5, 8-6, 8-7

Why? When you are able to recognize polygons and distinguish between different types of polygons, it is easier to apply the properties of special features of polygons.

A **polygon** is a closed plane figure bounded by three or more line segments that intersect only at their endpoints.

Polygons



Not polygons



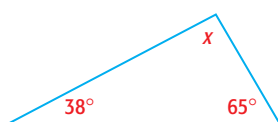
Triangles					
Acute triangle	Obtuse triangle	Right triangle	Scalene triangle	Isosceles triangle	Equilateral triangle
Quadrilaterals					
Parallelogram	Rectangle	Rhombus	Square	Trapezoid	

Angles in Polygons

Lesson 8-8

Why? When you know the sum of the interior angles of a polygon and all the angle measures but one, you can find the missing angle measure.

The sum of the interior angles of a triangle is 180° .



Find the measure of the unknown angle.

$$\begin{aligned} 38^\circ + 65^\circ + x &= 180^\circ \\ 103^\circ + x &= 180^\circ \\ x &= 77^\circ \end{aligned}$$