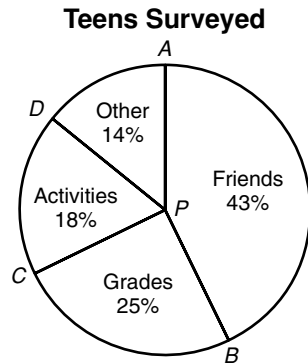


LESSON **11-2** **Problem Solving**
Arcs and Chords

- Circle D has center $(-2, -7)$ and radius 7. What is the measure, in degrees, of the major arc that passes through points $H(-2, 0)$, $J(5, -7)$, and $K(-9, -7)$?
- A circle graph is composed of sectors with central angles that measure $3x^\circ$, $3x^\circ$, $4x^\circ$, and $5x^\circ$. What is the measure, in degrees, of the smallest minor arcs?

Use the following information for Exercises 3 and 4.

The circle graph shows the results of a survey in which teens were asked what says the most about them at school. Find each of the following.



- $m\widehat{AB}$

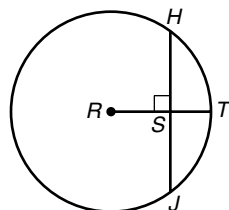
- $m\angle APC$

Choose the best answer.

- Students were asked to name their favorite cafeteria food. The results of the survey are shown in the table. In a circle graph showing these results, which is closest to the measure of the central angle for the section representing chicken tenders?
A 21° **C** 83°
B 75° **D** 270°

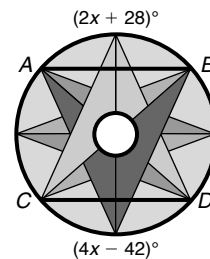
Favorite Lunch	Number of Students
Pizza	108
Chicken tenders	75
Taco salad	90
Other	54

- The diameter of $\odot R$ is 15 units, and $HJ = 12$ units. What is the length of \overline{ST} ?



- F** 2.1 units **H** 4.5 units
G 3 units **J** 9.6 units

- In the stained glass window, $\overline{AB} \cong \overline{CD}$ and $\overline{AB} \parallel \overline{CD}$. What is $m\angle CBD$?



- A** 35° **C** 98°
B 70° **D** 262°