Circle Graphs

The whole circle is 100 percent and 360 degrees. Percent of 360 gives degrees; degrees out of 360 gives percent.

Name _____ Date _____

Words we use

say the math word, then the plain English

WORD	PLAIN ENGLISH	WHAT YOU DO
Circle graph	A circle cut into slices that show parts of a whole.	The whole circle is 100 percent.
Sector, or slice	One piece of the circle.	Read it as a percent and as degrees.
Degree	One 360th of a full turn.	Percent of 360 gives the degrees.
Whole	The entire circle: 100 percent and 360 degrees.	Every slice is a part of it.

Part A Percent and degrees

PERCENT	DEGREES
50%	
	90°
10%	
40%	
	54°
5%	

Part B Build one

SPORT (30 STUDENTS)	COUNT	PERCENT	DEGREES
soccer	12		
basketball	9		
football	6		
other			
total	30		

Part C Read one backward

1. A store sold 2,400 phones. One slice is 54 degrees. How many of that model?

2. Of 200 students, the biggest slice is 126 degrees. How many students?

3. 840 of 2,400 phones were model B. Percent and degrees?

Part D Exit ticket

1. In a circle graph of 50 students, the walking slice is 72 degrees. How many walk?

2. How many degrees is 40 percent of a circle?

3. 12 of 30 students pick soccer. Percent and degrees?

Answer key

Part A. 180°; 25%; 36°; 144°; 15%; 18°.

Part B. Soccer 40%, 144°. Basketball 30%, 108°. Football 20%, 72°. Other 3, 10%, 36°. Total 100%, 360°.

Part C. 1. 360 phones. 2. 70 students. 3. 35%, 126°.

Part D. 1. 10 students. 2. 144°. 3. 40%, 144°.