

## 6B Circle Graphs and Bar Graphs.doc

Prealgebra

Name: \_\_\_\_\_ Due Date: \_\_\_\_\_

**WHY:** Circle graphs and bar graphs are often used rather than tables to display data. Graphs can give you a quick feeling for the data.

### LEARNING OBJECTIVES:

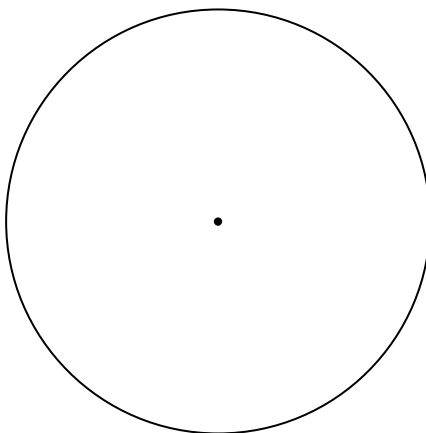
- 1) Construct clear, accurate circle graphs from tables.
- 2) Construct clear, accurate bar graphs from tables.

### ACTIVITY:

- 1) What does it mean for a circle graph to be “clear”?
  
- 2) Construct a circle graph for the table below.

Absence from Work Due to Carpal Tunnel Syndrome		Degrees
Under 3 days	7%	
3–10 days	18%	
11-20 days	14%	
21 or more days	61%	

- a) First Look on the last page of this handout. Cut out the protractor. You will use the protractor to measure angles in your circle graph.
- b) Fill in the last column of the table (degrees).
  - i) Show your calculations in the table.
  - ii) What is a reasonable place to round off to? Why?
  
- c) Now draw the circle graph.



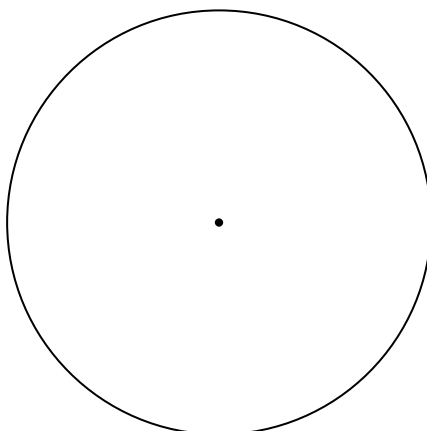
**6B Circle Graphs and Bar Graphs.doc**

3) Construct a circle graph for the table below.

**Where students live while attending college**

<b>Living Arrangement</b>	<b># of students</b>	<b>Degrees</b>
Parent's or Guardian's Home	320	
Campus Housing	180	
Off-Campus Rental	124	
Own Off-Campus Housing	62	
Other Arrangements	14	

- a) What is the total number of students in the survey?
- b) Use proportions to fill in the last column of the table (degrees). Show your proportions in the table. Round off to a reasonable place.
- c) Now draw the circle graph.



4) What does it mean for a bar graph to be “clear”?

## 6B Circle Graphs and Bar Graphs.doc

5) Create a vertical bar graph for the table to the right.

a) What is the smallest number? \_\_\_\_\_

What is the largest number? \_\_\_\_\_

What is the difference? \_\_\_\_\_

b) How many “tic marks” are there on the graph?

c) If you put the smallest number at the bottom, and the largest number at the top, how much would each tic mark be worth? Show your calculation.

d) Round the answer in Part (c) **up** to a “nice” number. \_\_\_\_\_

e) What does a “zig-zag” on the axis mean? Will you use one? Why?

f) Make the bar graph.

**Leading U.S Passenger Airlines**

Airline	# of Passengers (in millions)
Delta	105
United	87
American	81
Southwest	59
U.S. Airways	58
Northwest	50

