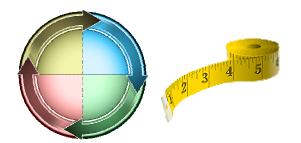
Proportional Measures For circles



Name ______ Date _____

Do the diameter and the circumference of all circles form a proportion? To investigate this question, follow the steps below:

Diameter	Circumference
1	
2	
3	
4	
0	
	1 2 3

- 1. Use 3.14 for π in the equation $c=\pi d$ to find six ordered pairs for the diameter (x) and circumference (y) lengths of six circles. List these in the table.
- 2. Write each ordered pair from the table as a ratio y:x. Find the decimal equivalent for each ratio.
- 3. Plot the ordered pairs for diameter and circumference on the grid below.
- 4. What is the approximate slope of the line?
- 5. How does the slope of the line compare to the y:x ratios?
- 6. Why do you think the slope of the line is π ?

