

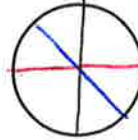




Lesson 9-6 Notes - Circles

Term	Definition	Example
Circle	The set of all points in a plane that are the same distance from a given point, called the center.	
Chord	A segment whose endpoints are on the circle.	
Diameter	A chord that passes through the center of the circle. (cuts circle in half)	
Radius	A segment that has one endpoint at the center of the circle and the other point on the circle. (half of diameter)	
Circumference	The distance around the circle.	

Investigation: What is the relationship between circumference and diameter of a circle?

Object	Diameter	Circumference	$\frac{\text{Circumference}}{\text{Diameter}}$
Magnet	140 mm ^{6.5 cm}	470 mm ^{22 cm}	3.35 ^{3.40}
Playdough	14 cm ^{66 mm}	45.4 cm ^{224 mm}	3.25 ^{3.39}
tape	105 mm	353 mm	3.36
* bucket	100 mm	310 mm	3.1
lid	183 mm	602 mm	3.295

What do you notice about the circumference to diameter ratio? close 3.2

$$\pi \text{ (pi)} = 3.14$$

Formula for Circumference: $\pi \cdot d$ or $2\pi r$