

Center: The middle dot  
The name of the Circle  $\odot P$

Radius: From Center to edge  
 $r = \frac{d}{2}$  (measure always the same)

Diameter: edge to edge, pass through  
the Center.  $d = 2 \cdot r$

Chord: edge to edge, does not pass  
The Center.

Arc:

Secant: A line that pass through two points on the Circle

Tangent: A line that pass the Circle in one point.

Circumference: Distance around the Circle

$$C = 2\pi r$$

Area: The inside measure of the Circle

$$A = \pi r^2$$

How is a circle different from any other shapes?

NO Sides, No Corners, NO angles.

Name it 'with one letter (center)

Use the letters on the picture to write the names:

a) The circle:  $\odot C$

b) A line segment that is a

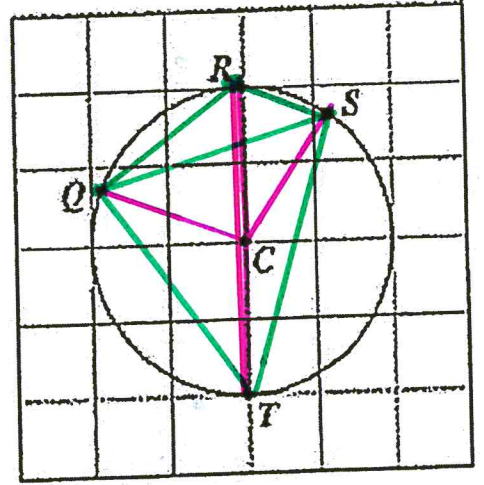
radius:  $\overline{CS}, \overline{CR}, \overline{CQ}, \overline{CT}$

c) A line segment that is a

diameter:  $\overline{RT} / \overline{TR}$

d) A line segment that is a

chord:  $\overline{QR}, \overline{RS}, \overline{QT}, \overline{TS}, \overline{QS}$



Find the Circumference of a circle:  $C = 2\pi r$

a) With radius of 6

$$C = 2\pi(6)$$

$$C = 12\pi \text{ (in term of pi)}$$

$$C = 37.68$$

b) With diameter of 10

$$C = 10\pi$$

$$C = 31.4$$

$$d = 2r / C = \pi d = d \cdot \pi$$

Find the Area of a circle:

$$A = \pi r^2 \text{ [unit is squared]}$$

a) With radius of 6

$$A = 36\pi$$

$$A = 113.04$$

b) With diameter of 10

$$d = 2r \rightarrow r = 5$$

$$A = 25\pi$$

$$A = 78.5$$