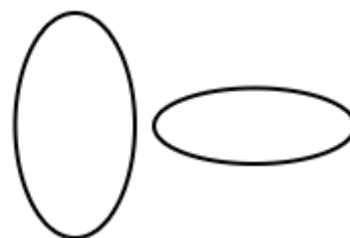


# Circles

Everybody knows these are NOT circles. But why?



These figures are rounded, but they are not circles.

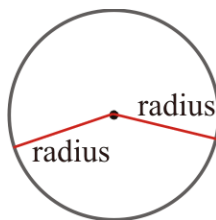


These are ovals, and they are round, but they are still not circles. What about them is different from circles?

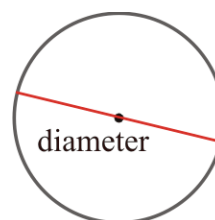
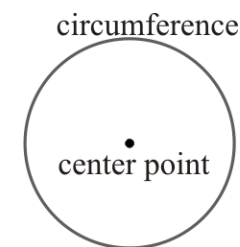
Each circle has a **center point** in the middle of the circle. The actual circle line is called the **circumference**.

All the points on the circumference are **at THE SAME DISTANCE** from the center point.

This distance from the center point to any point on the circumference is called the **radius**.



A line through the center point is called a **diameter**.

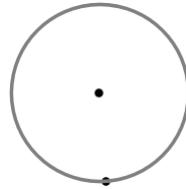


- Using a compass, draw a circle with a radius of **a. 2 cm** **b. 2 inches** **c. 1 1/2 inches**.

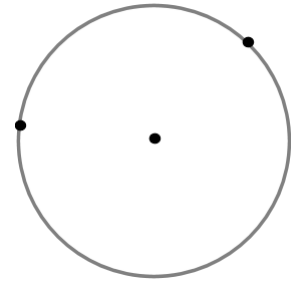
2. Draw a radius or a diameter from the given point. Look at the example.



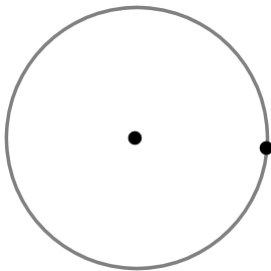
**Example.** A radius is drawn from the given point.



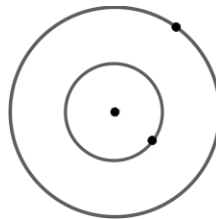
**a.** Draw a radius from the given point.



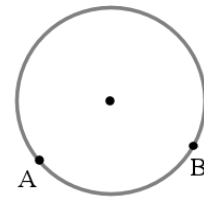
**b.** Draw a radius from each of the given points.



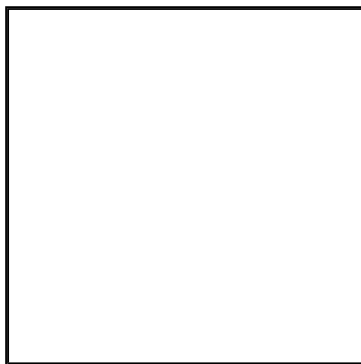
**c.** Draw a diameter from the given point.



**d.** Draw a diameter for the smaller circle and a diameter for the bigger circle from the given points.



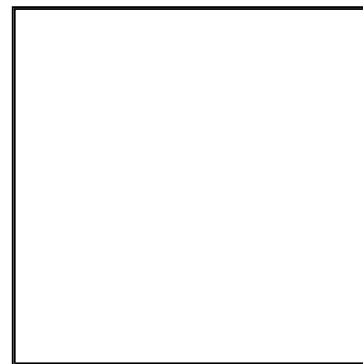
**e.** Draw a radius from point A and a diameter from point B.



3. Draw a circle *around* the square so that it touches the vertices of the square.

*Hint:* you need to first locate the center point of the circle.

What part of the square has the same length as the diameter of the circle?



4. Draw a circle *inside* this square so that it touches the sides of the square but does not intersect them.

What part of the square has the same length as the diameter of the circle?