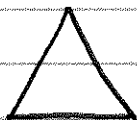


# Polygons and Circles

\* A polygon is a closed plane figure made up of lines.

\* Regular Polygons - sides are equal length and angles have equal measure



Triangle  
3 sides



Quadrilateral  
4 sides



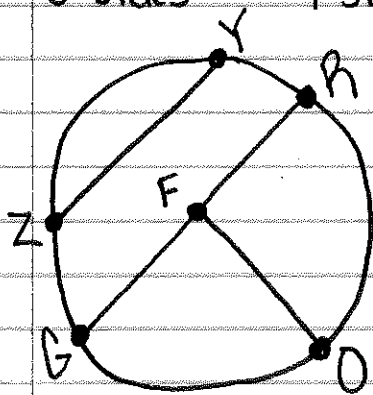
Pentagon  
5 sides



Hexagon  
6 sides



Octagon  
8 sides



Name: Circle F  
Radius:  $\overline{FR}$ ,  $\overline{FO}$ ,  $\overline{FG}$   
Diameter:  $\overline{GR}$

\* A circle is NAMED by the point in the center.

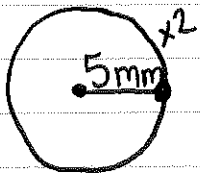
\* A RADIUS is a line segment that passes through the MIDDLE of the circle to the edge.

Short Line

\* A DIAMETER is a line segment that passes through the center of a circle. It has TWO points on the OUTSIDE edge of the circle. LONG LINE

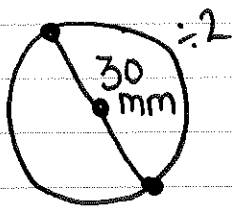
\* Chord - line segment that connects any two points on a circle  $\rightarrow$  Doesn't go through the center  $\overline{YZ}$

## Finding the Measurements of Radius and Diameters



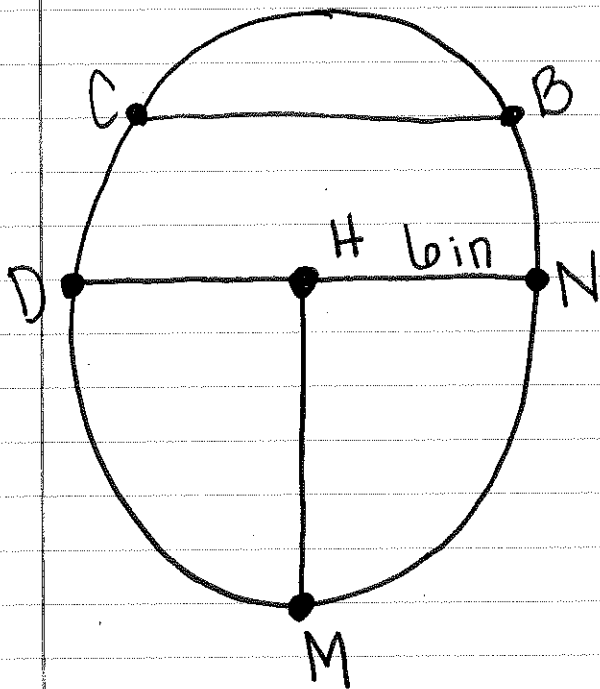
- To find the diameter, multiply the radius by 2

Diameter - 10 mm



- To find the radius, divide the diameter by 2

Radius - 15 mm



Name - Circle H  
Radius -  $\overline{HN}$ ,  $\overline{HM}$ ,  $\overline{DH}$   
Diameter -  $\overline{DN}$   
Chord -  $\overline{BC}$

Radius - 6 in  
Diameter - 12 in