PARTS OF A CIRCLE

EQ. What is a circle and how do we identify points, segments and lines that are related to a circle?

> A <u>Circle</u> is a set of points in a plane that have an equal distance from a given point.

Read each of the questions below. How can you respond to the questions using one of the mentioned circle parts and the given visual?

- The <u>Cente</u> of a circle is a point that has an equal 2 distance from each point on the circle. Which mentioned part is the center? A
- A <u>radius</u> of a circle is a segment between the center A and a point on the circle. Which mentioned part is a radius? AB, AC, AD
- A diame tev of a circle is a segment between two points 2 on the circle whose midpoint is the center. Which mentioned part is a diameter? CB
- A <u>Chord</u> of a circle is a segment between two points 2 on the circle. Which mentioned part is a non-diameter chord? EF
- A $\pm angen^{\perp}$ of a circle is a line that touches or 4 intersects the circle at exactly one point. Which mentioned part is tangent? 97
- > A <u>sccant</u> of a circle is a line that touches or intersects the circle at exactly two points. Which mentioned part is secant? GH
- A point of + angency of a circle is the point of intersection of a tangent. Which mentioned part 8 is a point of tangency? T
- >

How many radii make up a diameter? 2 How much of the diameter makes up a radius? $\frac{1}{2}$

- > From #2, segment AD is the mentioned radius. What are two other radii shown on the circle? AC, AB
- > From #4, segment EF is the mentioned non-diameter chord. What is another non-chord shown on the circle? GH

TANGENT	Pythagorean Theorem	
T	On OT, draw radius TN. The tangent line is <i>perpendicular</i> to the radius drawn to the tangent point.	$a^2 + b^2 = c^2$





For #7-12, ✓ whether the line or segment is best described as a radius, diameter, chord, secant or tangent.

		Radius	Diameter	Chord	Secant	Tangent	*1
7	ĂĔ				1		EXP
8	₩					V	∕ × ^B
9	AB						
10	₩ĂB				1		
11	EA			V	V		
12	BC	V					A
		V					¥* —





Common Internal Tangent

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DR

23



