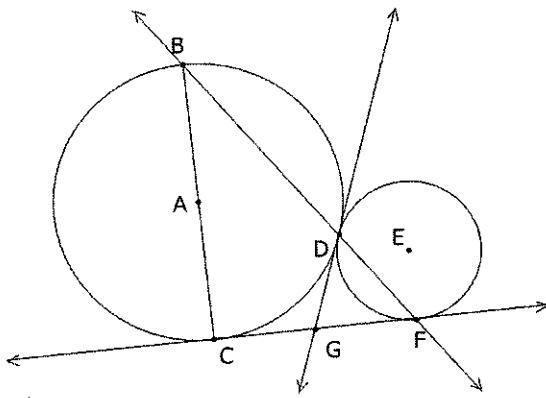


TEST REVIEW
Angles & Arcs

Name: _____

- A. The set of all points equidistant from a given point called the center of the circle
- B. Distance from the center of the circle to a point on the circle
- C. A line that intersects the circle at exactly two points.
- D. An arc which has a measure less than 180°
- E. An arc that equals 180°
- F. A line which intersects a circle exactly one time
- G. A line segment whose endpoints are on the circle
- H. An angle whose vertex is at the center of the circle
- I. The distance across the entire circle through the center. Also is known as the longest chord
- J. An arc which has a measure more than 180°
- K. The point where the tangent line intersects the circle

TERM	DEFINITION
Circle	A
Chord	G
Diameter	I
Radius	B
Secant Line	C
Tangent Line	F
Point of Tangency	K
Central Angles	H
Major Arc	J
Minor Arc	D
Semicircle	E



Choices are:

- \overline{DCB} \overline{DF} \overline{BC} $\angle BAC$ ~~E~~ \overline{AB}
 \overline{FC} \overline{DF} D \overline{BDC} \overline{DG} \overline{BD}

One center	E
One diameter	\overline{BC}
One secant line	\overleftrightarrow{BD}
One semicircle	\overline{DCB}
One point of tangency	D
One minor arc	\overline{DF}
One central angle	$\angle BAC$
One major arc	\overline{DCB}
One chord	\overline{DF}
One radius	\overline{AB}

CENTRAL ANGLES: Find the measure of each central angle and arc. (*central, same*)

$m\angle MRL = 45^\circ$
 $m\text{Arc MQP} = 180^\circ$

$360 - 90 = 270$
left over
 $\frac{270}{2} = 135^\circ$
 if $\angle ADC = \angle BDC$;
 solve for measure of arc AC

measure of Arc ST?
 $180 - 67 - 67 = 46^\circ$

$m\angle RPT = 180 - 55 - 47 = 78^\circ$
 $m\angle RPT = 78 + 55 = 133^\circ$

Measure of arc JL
 120°

measure of Arc XT
 125°

INSCRIBED ANGLES: Solve each using inscribed angles and intercepted arcs. (*take half or times by 2*)

$\frac{112}{2} = 56^\circ$

$\frac{102 + 98}{2} = 100^\circ$
 $\frac{160}{2} = 80^\circ$

$\frac{90}{2} = 45^\circ$

$2 \cdot (x+25) = 6x-6$
 $2x+50 = 6x-6$
 $x = 14$

$2(94x-1) = 186$
 $188x-2 = 186$
 $x = 1$

$2 \cdot 59 = 10x+8$
 $118 = 10x+8$
 $x = 11$

$2 \cdot 45 = 90$
 $360 - 90 = 270$

$360 - 110 = 250$
 $63x - 2 = 250$
 $63x = 252$
 $x = 4$

$2 \cdot 75 = 150$

Vertex Inside ("arc + arc over two equals the angle")

$\frac{185 + 125}{2} = 65$

$\frac{x + 58}{2} = 79$
 $x = 100$

$\frac{80 + 50}{2} = x$
 $x = 65$

$31x-7 + 8y-6 = 19x-3$
 $\frac{31x-7+8x-6}{2} = 19x-3$
 $\frac{39x-13}{2} = 19x-3$ $x=7$

$x+95+65 = 80$
 $\frac{x+160}{2} = 80$ $x=0$

$\frac{207+51}{2} = x$
 $x=129$

Vertex outside: Solve each. (LA-SA over 2 = angle)

$\frac{225-135}{2} = x$
 $45 = x$

$\frac{136-42}{2} = x$
 $x=47$

$\frac{195-75}{2} = x$
 $x=60$

$\frac{32x+1-55}{2} = 32x+1$

$\frac{235-125}{2} = -2+19x$
 $55 = -2+19x$
 $x=3$

$\frac{6x-8-58}{2} = 6x-8$
 $54 = 6x-8$
 $+8 \quad +8$
 $60 = 6x$
 $6 \quad 6$
 $10 = x$

$\frac{92x-54}{2} = (32x+1) \cdot 2$
 $92x-54 = 64x+2$
 $-64x \quad -64x$
 $28x-54 = 2$
 $+54 \quad +54$
 $28x = 56$
 $\frac{28x}{28} = \frac{56}{28}$
 $x=2$

$60 = 6x$
 $6 \quad 6$
 $10 = x$