**SLO: I can solve problems involving inscribed angles and intercepted arcs..** Problems worthy of attack prove their worth by fighting
back. —Piet Hein THE ROAD TO WISDOM? Well, it's plain and simple to express. Err and err and err again, but less and less and less. — Piet Hein.

VOCABULARY (have your vocabulary sheet out EVERY day)

(1) TO READ AND DO: Use the website link for Task 2 #1 or your textbook to investigate the relationship between
intercepted arc, central angle, and inscribed angle measures. Complete a sketch for each example. Be sure to label the arc
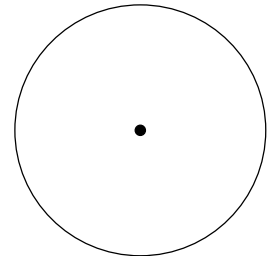measure, the central angle measure, and the inscribed angle measure.

a) An intercepted arc measures 50°. Therefore, the central angle measures _____ and the inscribed angle measures ____
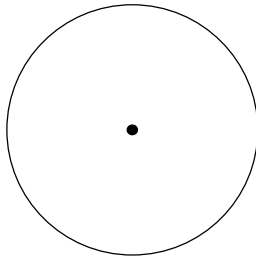
b) A central angle measures 88°. Therefore, the intercepted arc measures _____ and the inscribed angle measures ____
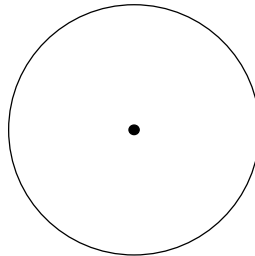
c) An inscribed angle measures 88°. Therefore, the intercepted arc measures _____ and the central angle measures ____

Write a sentence that summarizes the relationship between the measure of an **inscribed angle** a **central angle** and the **arc**
that both angles intercept. Include a labeled diagram and an equation showing the relationship.
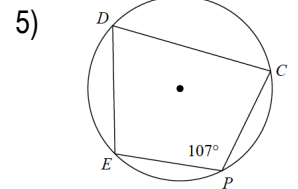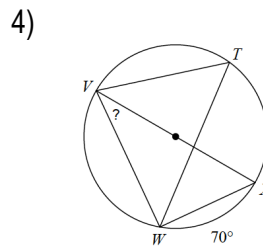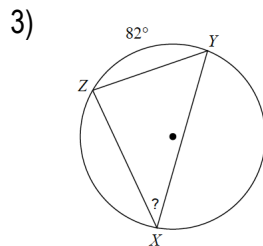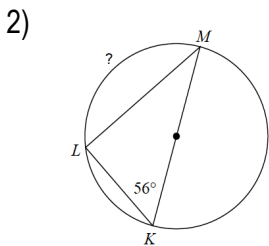
_____

_____
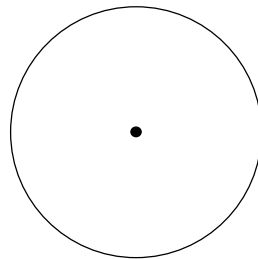
Equation:_____
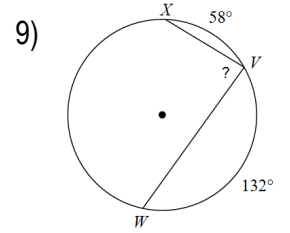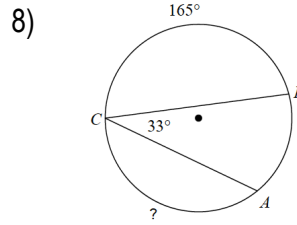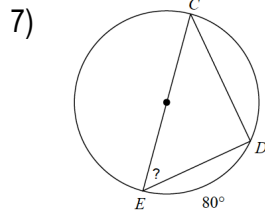
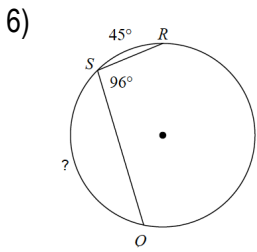**Find the degree measure of the arc or angle indicated.**
problems required, even problems are good practice.

*** Highlighting arcs and angles can be helpful. Odd

Find $m\overarc{EDC}$

2)

3) 82°

4)

5)

56° K L M ?

Z Y ? X

V ? T W 70° X

D C E 107° P

Name_____Per____

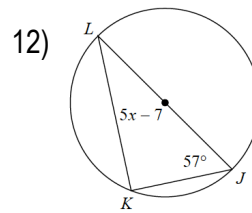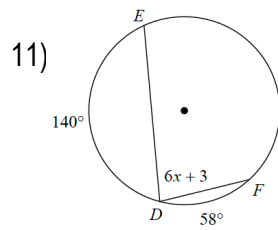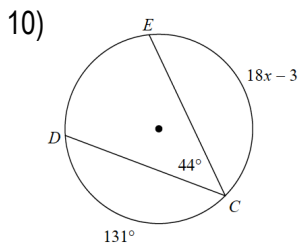## SLO: I can solve problems involving inscribed angles, and intercepted arcs. Problems worthy of attack prove their worth by fighting

back. —Piet Hein THE ROAD TO WISDOM? Well, it's plain and simple to express. Err and err and err again, but less and less and less. — Piet Hein.

6)

45° R
S
96°
?
O

7)

C
?
E   80°
D

8)

165°
C 33°   B
?   A

9)

X   58°
V
?
W   132°

Solve for x.

10)

E
18x − 3
D
44°
C
131°

11)

E
140°
6x + 3
D   58°   F

12)

L
5x − 7
57°
K   J

13)

C   13x − 2
D
5x + 8
B
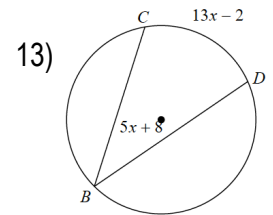
Find the measure of the arc or angle indicated.

14) Find $m\angle LKM$

L
101x − 1
K   51x − 1
M

15) Find $m\widehat{YW}$

X
8x + 12
8x + 4
Y
6x + 10   W

16) Find $m\widehat{YZ}$

X
11x
Y
Z   6x + 10

17) Find $m\angle CED$

E
2x + 35
D
2x + 70   C