Math 3 Unit 5 Circles Test Review   Name: _____ Date _____
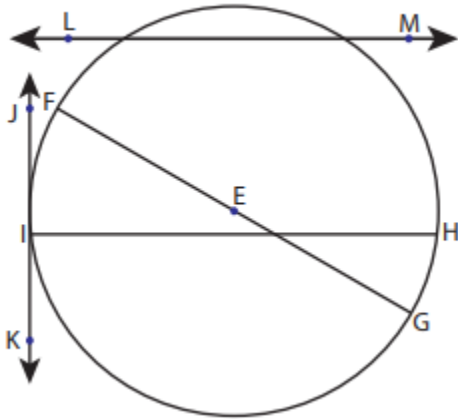
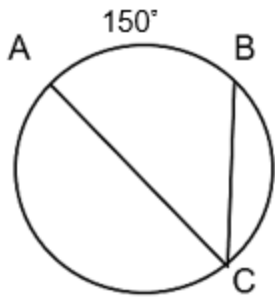1. Use the picture below to answer the following.

A. Circle: _____   B. Radius: _____   C. Diameter: _____

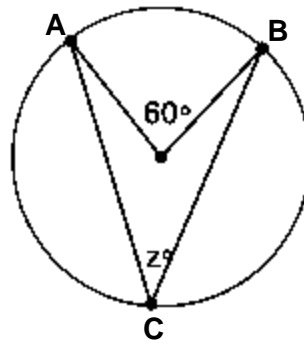D. Chord: _____   E. Secant: _____   H. Minor Arc: _____

F. Point of Tangency: _____   G. Tangent: _____

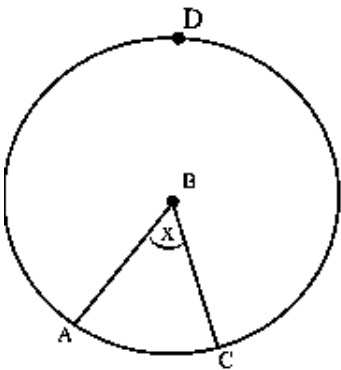I. Major Arc: _____   J. If FE = 6, what is the length of GF? _____

2. What is the measure of < C?

150°

3. What is the measure of < z and arc AB?

60°

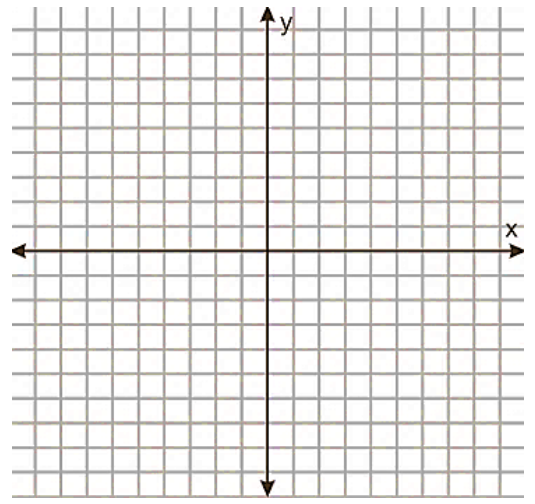4. The measure of arc ADC = 290°. Find the measure of x.

5. Given the equation of the circle: $(x + 2)^2 + (y - 5)^2 = 100$, identify the center and the radius.

6. **Graph** the following equation: $(x + 1)^2 + (y + 4)^2 = 9$ and **find the center and radius**.
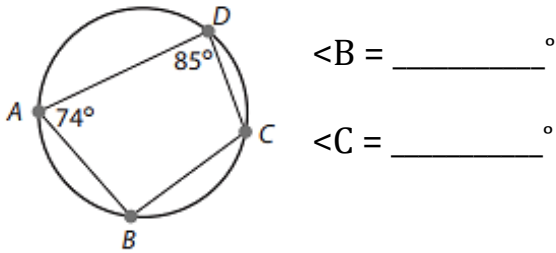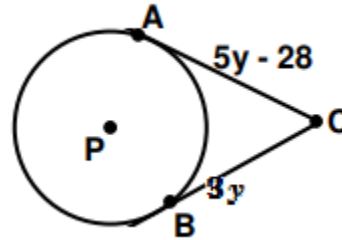
Center: _____

Radius: _____

7. a) Write the circle equation $x^2 + y^2 - 6x + 4y - 3 = 0$ in **standard form**.

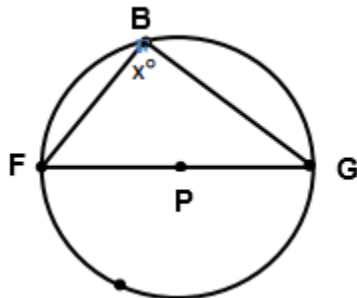b) Identify the following: Center: _____   Radius: _____
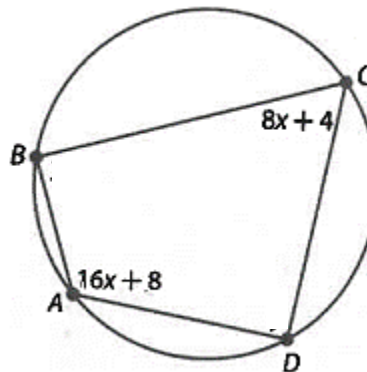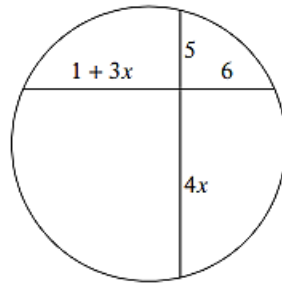
8. Find the missing angles.

<B = _____°

<C = _____°

9. Find the length of AC.

5y - 28

-3y

10. Find x.

11. Solve for x.

8x + 4

16x + 8

12. Solve for x.

In the circle: $1 + 3x$, 5, 6, $4x$

13. Solve for x.
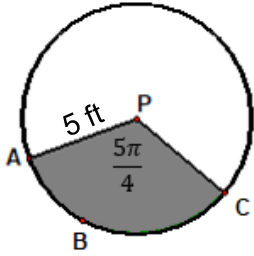

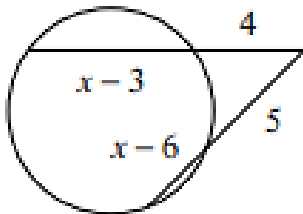Labels: S, x, N, P, $70°$, Q, R, $75°$
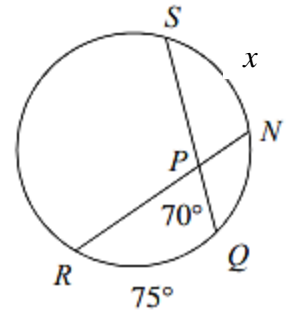
14. Find the **arc length** of the shaded region. Round to the nearest hundredths place.

$285°$, 8 in
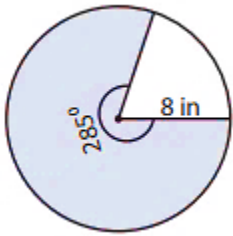
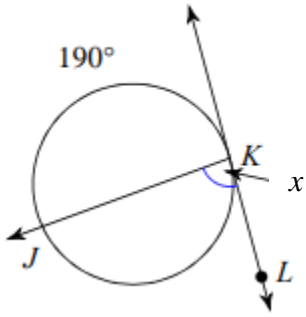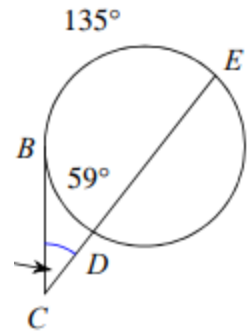15. Find the **area of sector** of the shaded region. Round to the nearest hundredths place.

Labels: P, 5 ft, A, $\dfrac{5\pi}{4}$, C, B

16. Solve for x.

Labels: 4, $x - 3$, 5, $x - 6$

17. Solve for x.

Labels: Q, $15x$, 18, P, R, 32, S
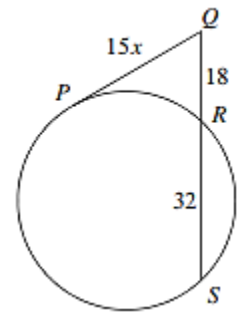
18. Find the measure of x.

190°

K
x
J
L

19. Solve for <C.

135°

E

B
59°
D
C

20. $\overline{BC}$ is a tangent to circle A. Find the measure of x given m<C = 33°.

B

A x

33

C
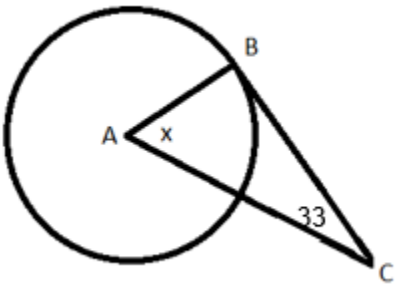
21. AB is tangent to Circle C. **Find x.**

A

x

C

4

1 B