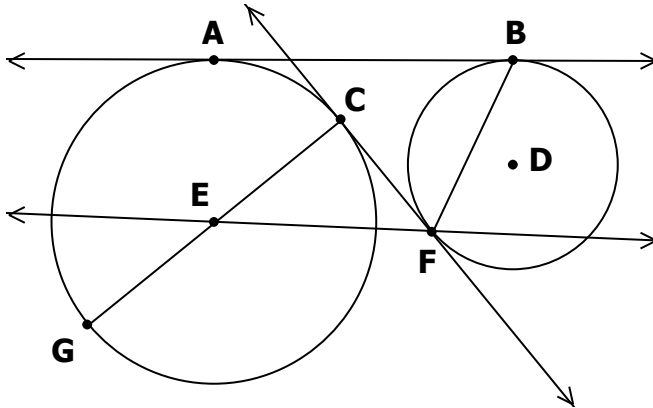# GSE Accelerated Geometry
EXAM REVIEW
Part 2

Name _____

Period _____   Date _____

(Note: Assume things that appear to be tangent really are tangent.)

1. Vocab. Match each object to the word/phrase that **best** describes it. You will NOT use all the words.
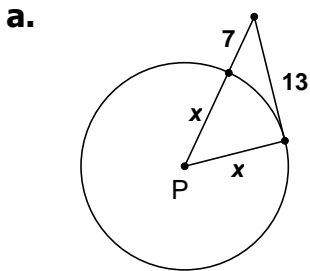

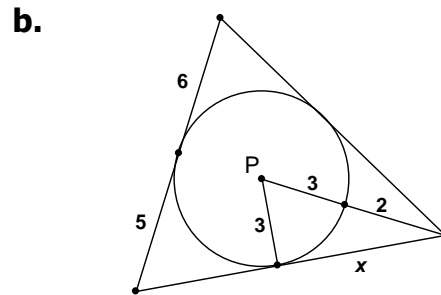|	
common external tangent	minor arc
common internal tangent	secant
point of tangency	center
chord (not a diameter)	major arc
Diameter	
Congruent circles	semicircle
Similar circles	
You will NOT use all the words.	radius

a. $\overleftrightarrow{CF}$ _____

b. $\overparen{GAC}$ _____

c. $\overline{BF}$ _____

d. $\overleftrightarrow{EF}$ _____

e. $\overleftrightarrow{AB}$ _____

f. $\overparen{AGC}$ _____

2. Segments, Part A. Find x. Give non-integer answers as reduced fractions.
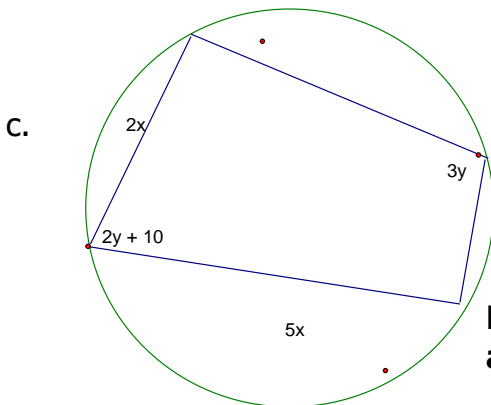**Use Pythagorean Theorem on a and b.**
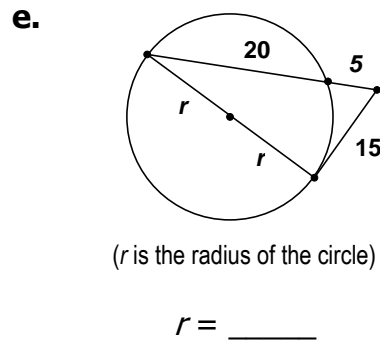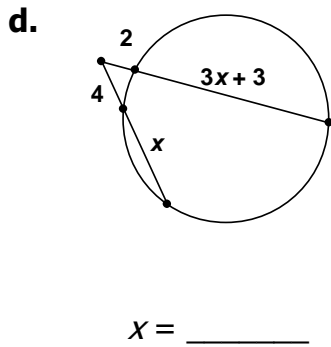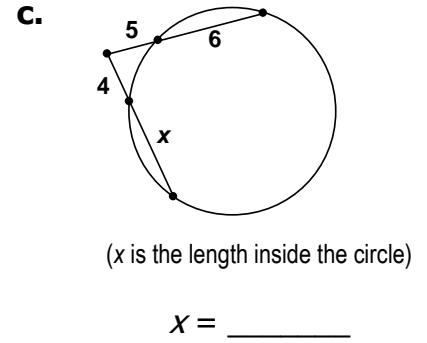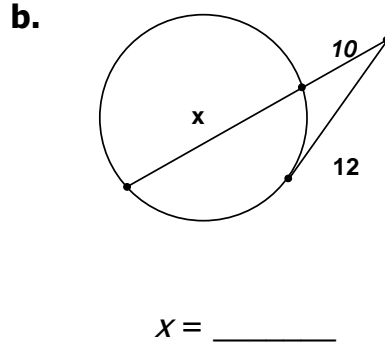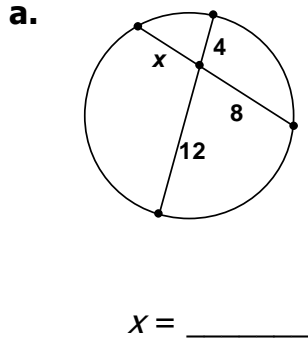
a.

$x =$ _____

b.

$x =$ _____

Perimeter of the big $\Delta =$ _____

c.

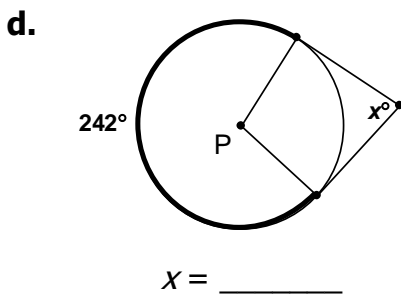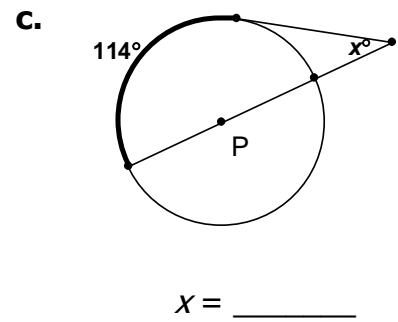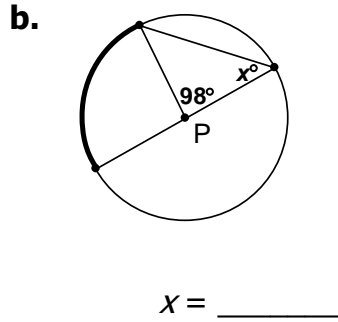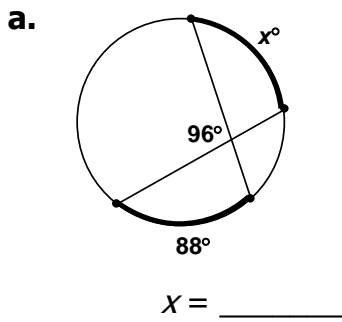$x =$ _____ $y =$ _____

Note: **Opposite angles of a quadrilateral inscribed in a circle are supplementary.**

3. Segments, Part B. Solve for the variable. Give non-integer answers as reduced fractions.
Use theorems such as whole×outside = whole×outside OR whole×outside = tangent²

a.

x 4 8 12

$X =$ _____

b.

10 x 12

$X =$ _____

c.

5 6 4 x

(*x* is the length inside the circle)

$X =$ _____

d.

2 $3x + 3$ 4 x

$X =$ _____

e.

20 5 r r 15

(*r* is the radius of the circle)

$r =$ _____

4. Angle and Arc Measures. Find the value of x. Assume P is the center.

a.

$x°$ 96° 88°

$X =$ _____

b.

98° $x°$ P

$X =$ _____

c.

114° $x°$ P

$X =$ _____

d.

242° P $x°$

$X =$ _____

e.

$x°$ P 64°

$X =$ _____
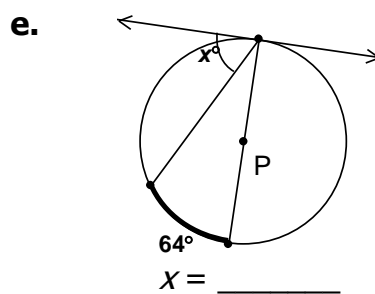
5. Circle Puzzles.
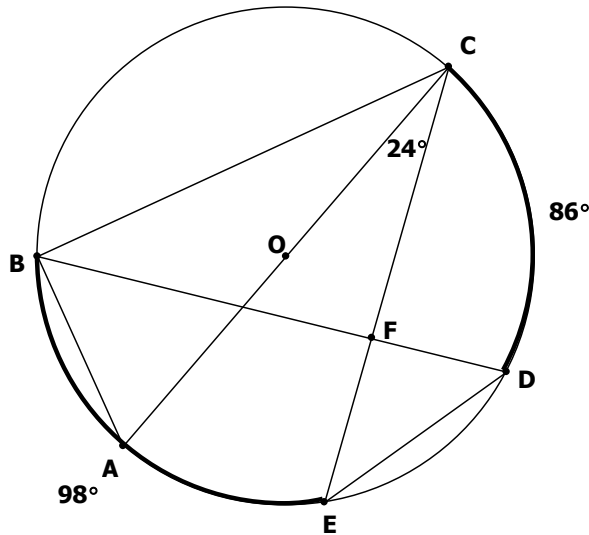
Given: $m\overarc{CD} = 86°$; $m\overarc{BE} = 98°$;

$m\angle ACE = 24°$; $\overline{AC}$ is a diameter of $\odot O$

24° **86°** **98°**

a. $m\,\overarc{AB}$ _____

b. $m\angle EFB$ _____

c. $m\angle BCA$ _____

d. $m\angle BAC$ _____

e. $m\,\overarc{AD}$ _____

f. $m\angle BDE$ _____

6. OMIT

7. Volume: Give exact answers only.

(a) Find the volume of the cylinder.

3 cm

6 cm
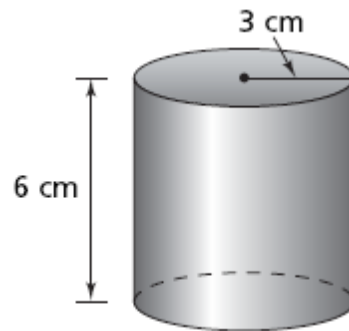
(b) Spaceship Earth at Epcot Center in Florida is a 180-foot Geosphere. Find the volume by assuming it is a sphere with a diameter of 180 ft.

(c) A Native American Tepee (conical tent) has a height of 12 feet and a base with a radius of 6 feet. What is the volume of the   Tepee?

(d) A candle mold is in the shape of a square pyramid, whose length of the sides of the base is 3 inches and the height is 5 inches. How much wax is needed for each candle?