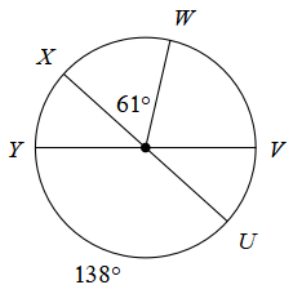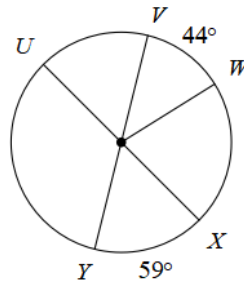Geometry

Circles Properties Review

Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.
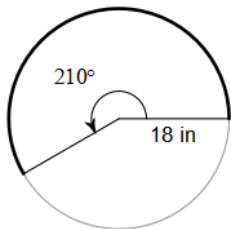
1) $m\widehat{WV}$

138°
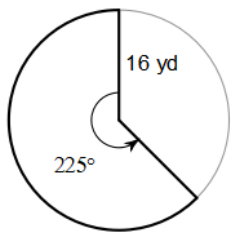
2) $m\widehat{XYV}$

Find the length of each arc.

3)

3b) The arc length of a circle is 24π *in*. The central angle that formed the arc is 270°. What is the length of the radius?
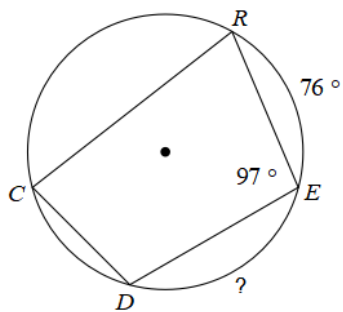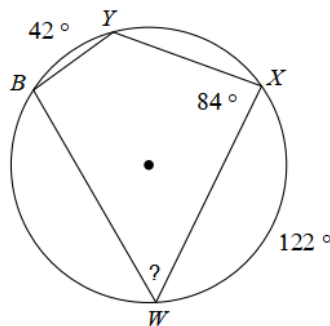
Find the area of each sector.

4)

4b) The sector area of a circle is 16π *in*. The central angle that formed the arc is 90°. What is the length of the radius?
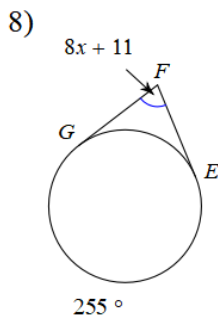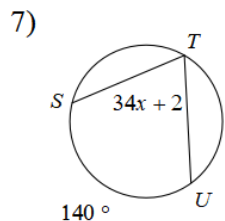
Find the measure of the arc or angle indicated.

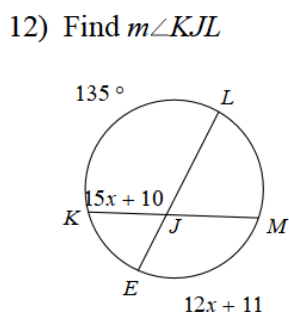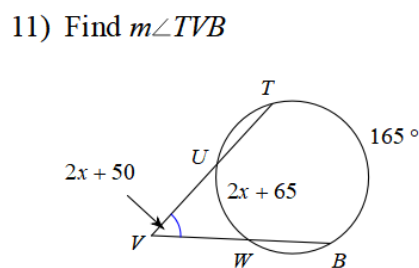5)

6)

Solve for x. Assume that lines which appear tangent are tangent.

7)

$34x + 2$

$140°$

T, S, U

8)

$8x + 11$

F

G

E

$255°$

Find the measure of the arc or angle indicated. Assume that lines which appear tangent are tangent.

9) Find $m\angle SRT$

$110°$

S

$14x + 5$

T

L, R

U

$14x - 2$

10) Find $m\angle TUV$

V

T

$6x - 9$

U

$30x$

11) Find $m\angle TVB$

T

$165°$

U

$2x + 50$

$2x + 65$

V

W B

12) Find $m\angle KJL$

$135°$

L

$15x + 10$

K J M

E

$12x + 11$

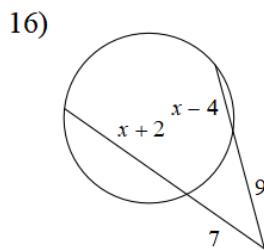**Solve for x. Assume that lines which appear tangent are tangent.**

13)

x

10 12

15

14)

12

x

18

15)

18 20

$13x + 1$

$15x$

16)

$x - 4$

$x + 2$

9

7
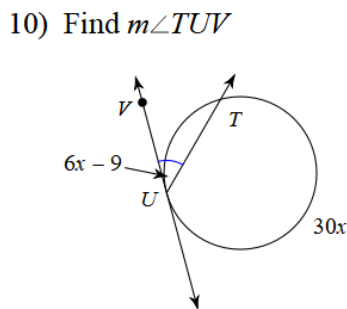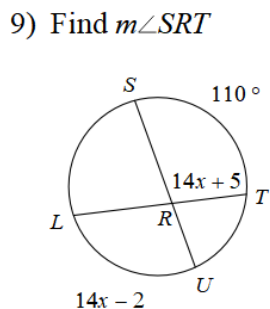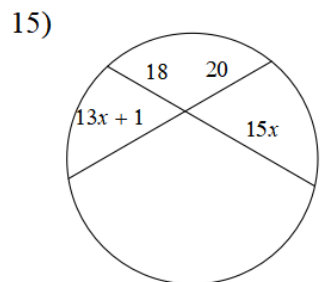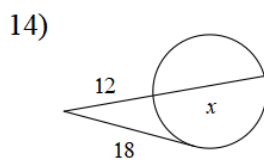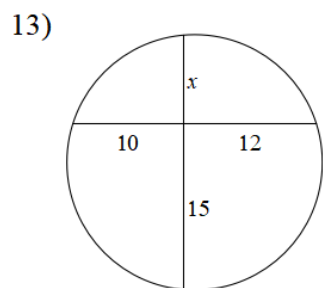
REMEMBER to review the three constructions!!!!!!