Circles and Chords
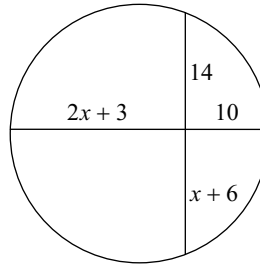
Name_____

Date_____

Solve for *x*. Assume that lines which appear tangent are tangent.
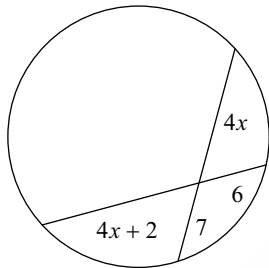
1)
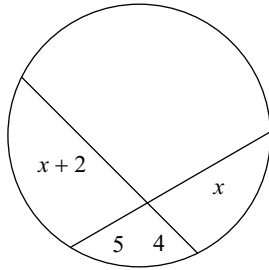
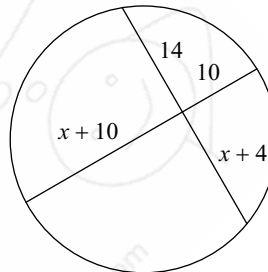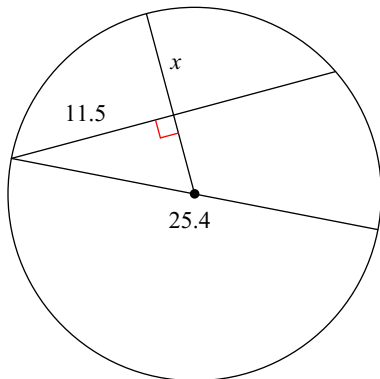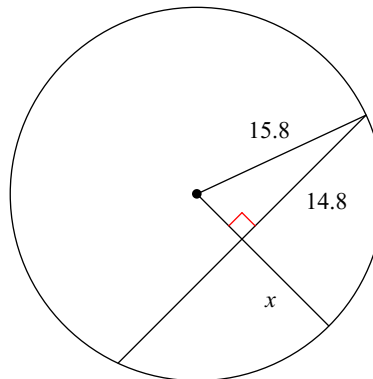
2)

3)

4)

Find the length of the segment indicated. Round your answer to the nearest tenth if necessary.
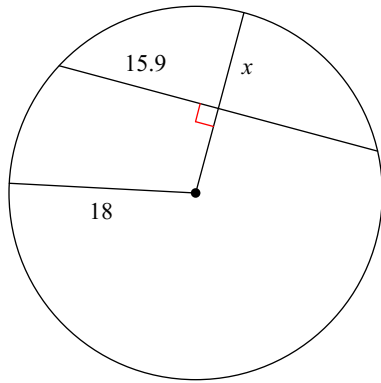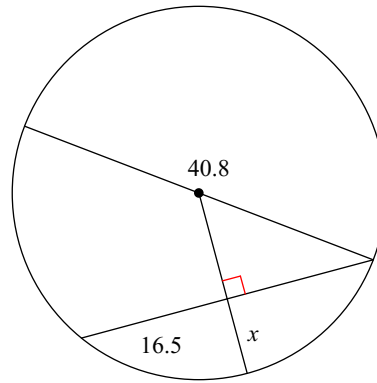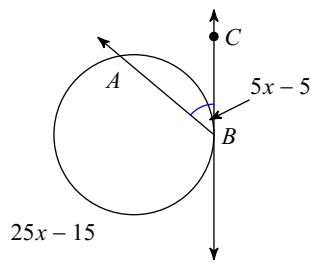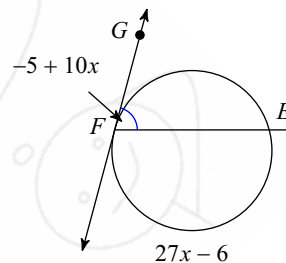
5)

6)

7)

15.9 x

18

8)

40.8

16.5 x

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

9) Find $m\widehat{AB}$

C

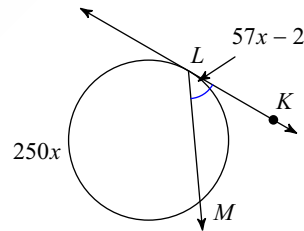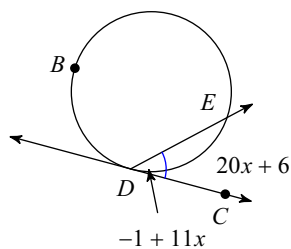A

$5x - 5$

B

$25x - 15$

10) Find $m\angle EFG$

G

$-5 + 10x$

F E

$27x - 6$

11) Find $m\widehat{HG}$

$3x + 254$

G

$x + 53$

F

H

12) Find $m\angle MLK$

$57x - 2$

L

K

$250x$

M

13) Find $m\widehat{EBD}$

B

E

$20x + 6$

D

C

$-1 + 11x$

14) Find $m\widehat{JMK}$

M

K J

$10x - 5$

$19x - 2$

L
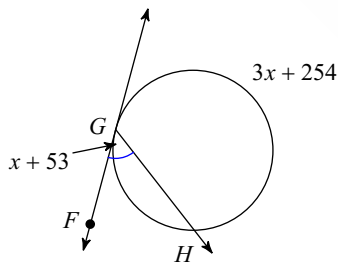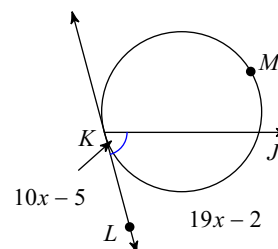
Answers to Circles and Chords

1) 8

2) 9

3) 3

4) 11

5) 7.3

6) 10.3

7) 9.6

8) 8.4

9) 100°

10) 75°

11) 106°

12) 55°

13) 274°

14) 210°