Checkpoint 9C   *Integrated Math 2*

Answer the questions thoroughly including any necessary math or explanations.

1) Convert the given angles from "degrees to radians" or from "radians to degrees."
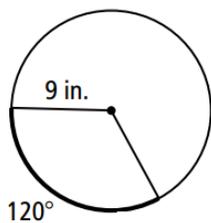
   a) $60°$ b) $240°$ c) $\dfrac{2\pi}{6}$ d) $\dfrac{2\pi}{3}$
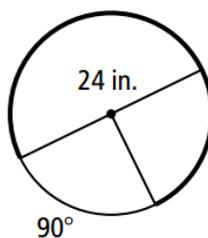
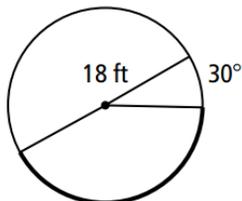*Determine the length of each darkened arc. Leave your answer in terms of π.*

1)

9 in.

120°

4)

24 in.

90°

2)

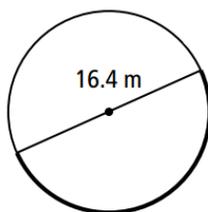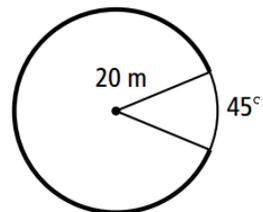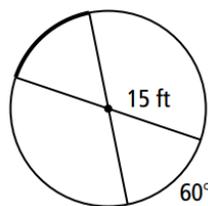18 ft   30°

5)

16.4 m

3)

20 m

45°

6)

15 ft

60°

Determine the area of the shaded sector. Leave your answer in terms of π.

7)

4

10)

12 120°

8)

36° 6

11)

45°
6

9)

45°
2

12)

2