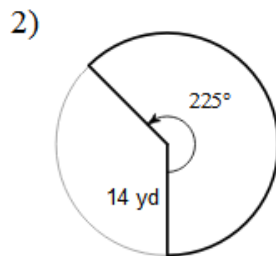# Sector Area

Find the area of each sector. Leave answers in terms of pi.

1)

6 mi

90°

2)

225°

14 yd
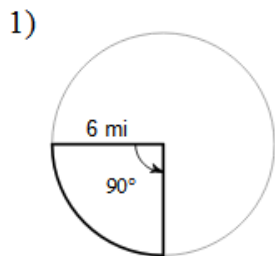
Find the area of each sector. Round your answers to the nearest thousandths.

3)

90°

8 in

4)

90°   13 in
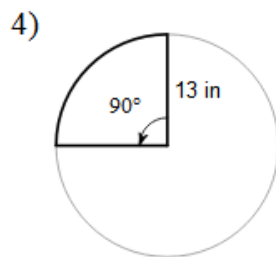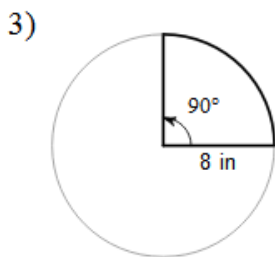
Find the area of each sector.

5) $r = 12$ yd, $\theta = 135°$

6) $r = 9$ yd, $\theta = 210°$

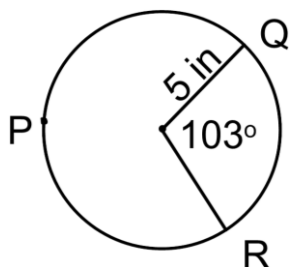**Find the missing value. Leave answers in terms of pi.**

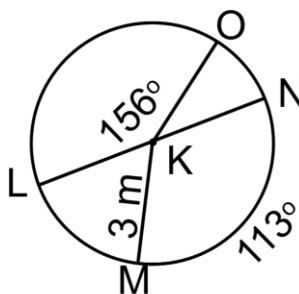7) If $A_{sector} = 16\pi$ in² and $\theta = 45°$, what is the radius?

8)) If $A_{sector} = 16\pi$ in² and $\theta = 45°$, what is the radius?

Find the area of each indicated sector. Round your answer to the nearest thousandth. Assume any segment that looks like a diameter is a diameter.

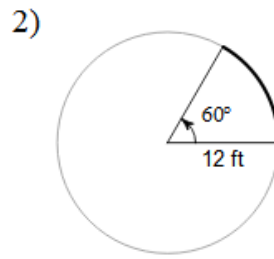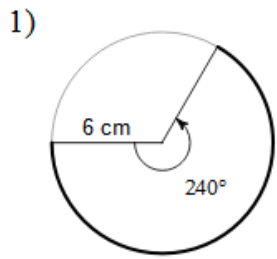9. Find the area of the sector formed by of $\overarc{RPQ}$.

P

5 in

Q

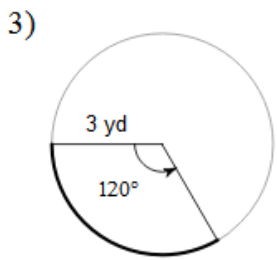103°

R

10. Find the area of the sector formed by $\overarc{ON}$.

O

156°

N

L

K

3 m

M

113°

Geometry   Name_____

Arc Length
                                            Date_____ Period_____

Find the length of each arc. Leave answers in terms of pi.

1)

6 cm
240°

2)

60°
12 ft

Find the length of each arc. Round your answers to the nearest hundredth.

3)

3 yd
120°

4)

10 mi
45°
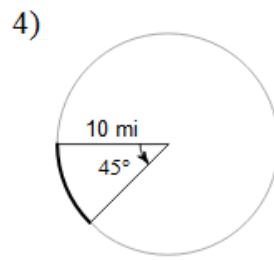
Find the length of each arc. Leave answers in terms of pi.

5) $r = 11$ mi, $\theta = 120°$

6) $r = 10$ cm, $\theta = 45°$

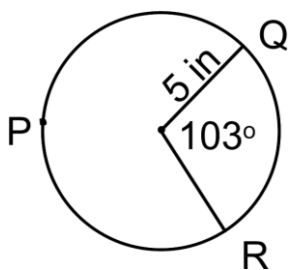**Find the missing value. Leave answers in terms of pi.**

7) If S = 4π ft and θ = 120°, what is the radius?

8) If S = 8π m and r = 13.5 m, what is the central angle?

Find the length of each indicated arc. Round answers to the nearest thousandth. Assume any segment that looks like a diameter is a diameter.

9. Find the length of $\overset{\frown}{RPQ}$.

Q
5 in
P
103°
R

10. Find the length of $\overset{\frown}{ON}$.

O
156°
N
L
3 m
K
113°
M