Find the length of $\overset{\frown}{AB}$.

1.

$\overset{\frown}{AB} =$

2.

$\overset{\frown}{AB} =$

3. **Find the length of $\overset{\frown}{FG}$.**

$\overset{\frown}{FG} =$

4. **Find the length of $\overset{\frown}{EHG}$.**

$\overset{\frown}{EHG} =$
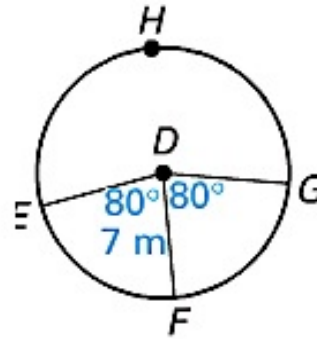
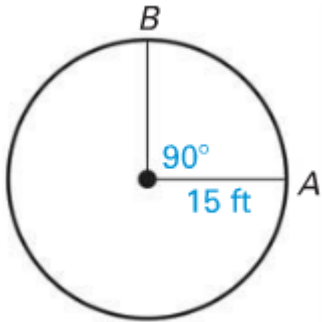5. **Find the perimeter of the shape below.**
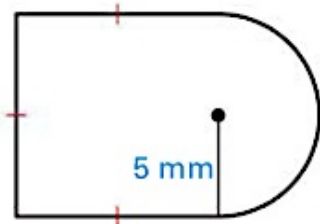
6. A pie is cut into 6 equal pieces. The arc length of 1 piece of pie is 5.4 cm. What is the diameter of the pie?

7. Ms. McFarland ran 4 times around a circular track that has a radius of 40 meters. What's the total distance she ran?
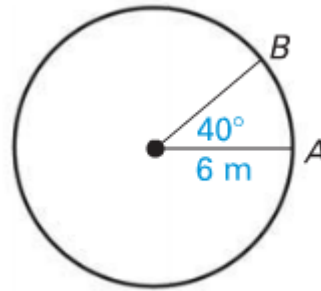
Find the length of $\overset{\frown}{AB}$.

1.   2.

$$\overset{\frown}{AB} = \frac{15}{2}\pi \text{ or } 23.56$$

$$\overset{\frown}{AB} = \frac{4}{3}\pi \text{ or } 4.19$$

3. **Find the length of $\overset{\frown}{FG}$.** $\overset{\frown}{FG} = \frac{28}{9}\pi \text{ or } 9.77$

4. **Find the length of $\overset{\frown}{EHG}$.** $\overset{\frown}{EHG} = \frac{70}{9}\pi \text{ or } 24.43$

5. **Find the perimeter of the shape below.**
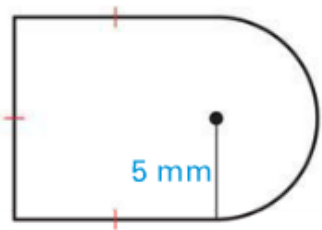
45.71

6. A pie is cut into 6 equal pieces. The arc length of 1 piece of pie is 5.4 cm. What is the diameter of the pie?
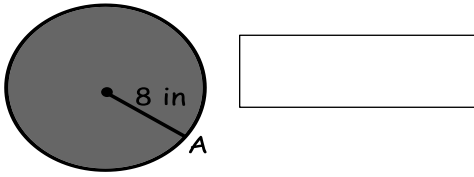
10.32

7. Ms. McFarland ran 4 times around a circular track that has a radius of 40 meters. What's the total distance she ran?
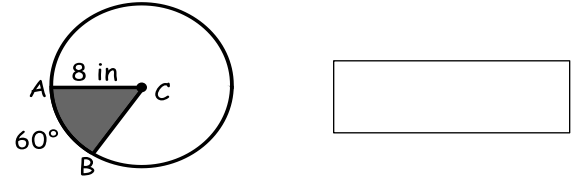
320π meters or 1005.31 meters
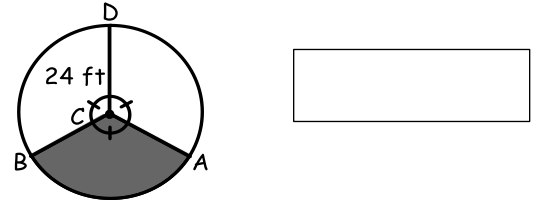
Find the area of the shaded region.

8.

9.
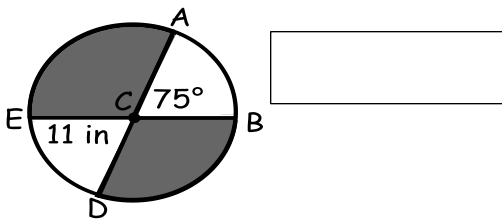
10.
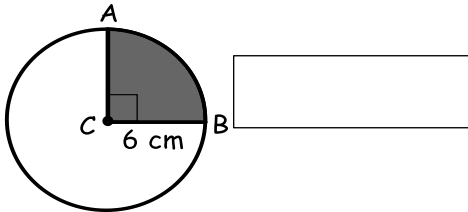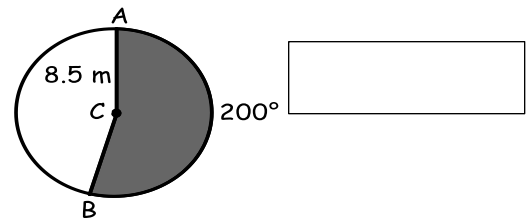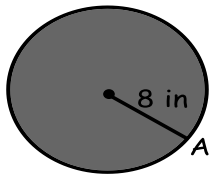
11.

12.

13.

14. Find the area of a sector whose central angle is 36° if the radius of the circle is 8 cm.

15. What would happen to the area of the sector with the same central angle as above but the radius is doubled? Make a conjecture of what you think would happen to the area of a sector every time you double its radius
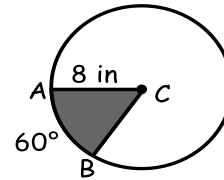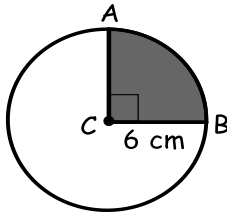
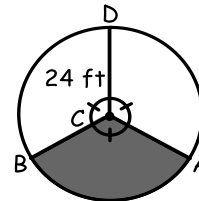*Find the area of the shaded region:*

8.

8 in

64π or 201.06

9.

8 in

60°

$\frac{32}{3}\pi$ or 33.51

10.

6 cm

9π or 28.27

11.

24 ft

192π or 603.19

12.

75°

11 in

$\frac{847}{12}\pi$ or 221.74

13.

8.5 m

200°
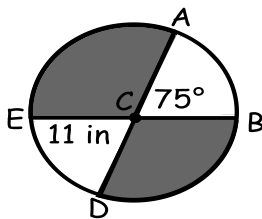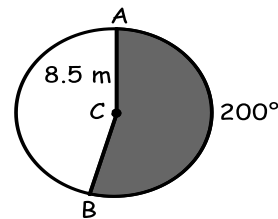
126.10

14. Find the area of a sector whose central angle is 36° if the radius of the circle is 8 cm.

$\frac{32}{5}\pi$ or 20.11

15. What would happen to the area of the sector with the same central angle as above but the radius is doubled? Make a conjecture of what you think would happen to the area of a sector every time you double its radius

$\frac{128}{5}\pi$ or 80.42

When you double the radius of a circle, it sector area will be approximately 4 times bigger than the original area.