Area of Circles and Sectors – Day 2

Unit 7: Circles

Find the exact area of the circle with the given radius or diameter.

1. Radius = 6 inches

2. Diameter = 21 feet

Find the indicated measure.

3. The area of a circle is 173 in^2. Find the radius.

4. The area of a circle is 290 m^2. Find the radius.

5. The area of a circle is 654 cm^2. Find the diameter.

6. The area of a circle is 528 ft^2. Find the diameter.

Find the area of the sectors formed by the given information.

7. Radius = 27 cm
   Central Angle = 130°

8. Diameter = 36 in
   Central Angle = 151°

9. Radius = 8 ft
   Central Angle = 60°

10. Diameter = 9 m
    Central Angle = 120°

Find the area of the circle given the central angle and the area of a sector of the triangle.

11. Area of the sector = 40.62 m^2
    Central Angle = 98°

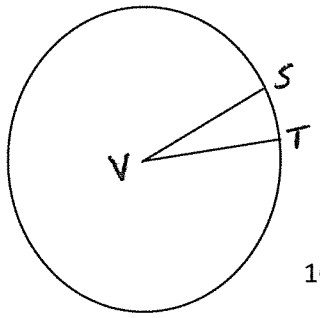
12. Area of the sector = 31.47 in^2
    Central Angle = 309°

13. Area of the sector = 36.07 ft^2
    Central Angle = 58°

14. Area of the sector = 84.14 cm^2
    Central Angle = 199°

Mixed Review:

Given circle V has an area of 624.36 m^2. The area of sector SVT is 64.17 m^2. Find the indicated measure.



15. Radius of circle V.

16. Circumference of circle V.

17. m $\widehat{ST}$

18. Length of $\widehat{ST}$