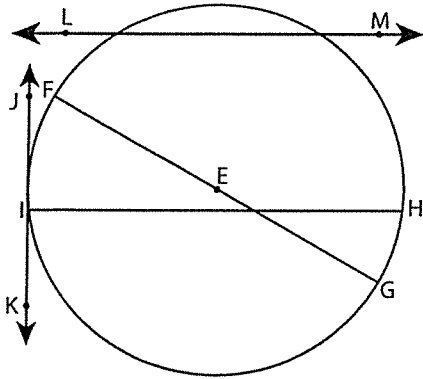


Parts of Circle

Moderate: S1

Identify the parts of each circle.

1)

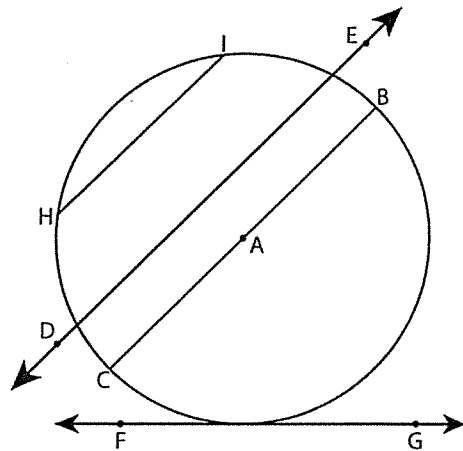


Circle = $\odot E$ Chord = \overline{IH}

Radius = $\overline{EG}, \overline{EF}$ Tangent = \overleftrightarrow{JK}

Diameter = \overline{FG} Secant = \overleftrightarrow{LH}

2)

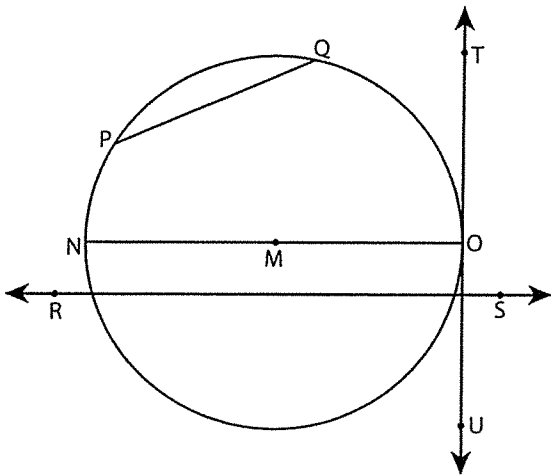


Circle = $\odot A$ Chord = \overline{IH}

Radius = $\overline{AB}, \overline{AC}$ Tangent = \overleftrightarrow{DE}

Diameter = \overline{CB} Secant = \overleftrightarrow{DE}

3)

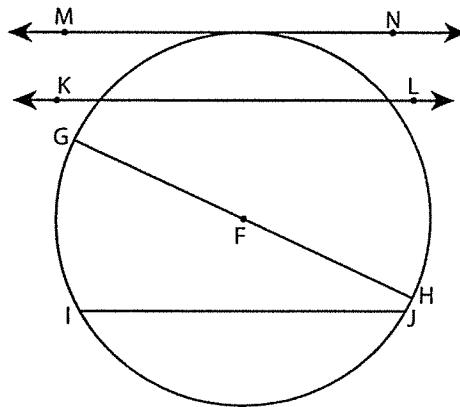


Circle = $\odot M$ Chord = \overline{PQ}

Radius = $\overline{MN}, \overline{MO}$ Tangent = \overleftrightarrow{TU}

Diameter = \overline{NO} Secant = \overleftrightarrow{RS}

4)

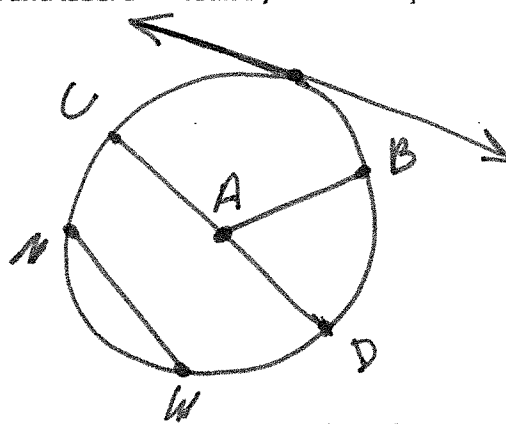


Circle = $\odot F$ Chord = \overline{IJ}

Radius = $\overline{FG}, \overline{FH}$ Tangent = \overleftrightarrow{KL}

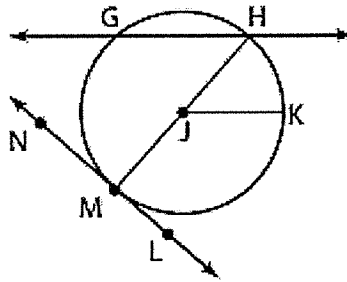
Diameter = \overline{GH} Secant = \overleftrightarrow{KL}

1. Sketch a circle. Then sketch and label a radius, a diameter, a chord, and a tangent.



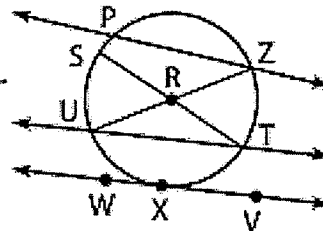
Match the part of the circle with the term that best describes it.

- 2. GH → A. Center
- 3. M → B. Chord
- 4. MJ → C. Diameter
- 5. J → D. Radius
- 6. MH → E. Point of tangency
- 7. \overleftrightarrow{GH} → F. Secant



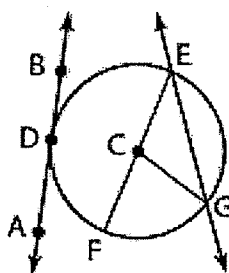
Identifying Terms Tell whether the line or segment is best described as a chord, a secant, a tangent, a diameter, or a radius.

- 27. PZ Chord
- 28. SR Radius
- 29. ST Diameter
- 30. \overleftrightarrow{PZ} Secant
- 31. \overleftrightarrow{VW} Tangent
- 32. TU Chord



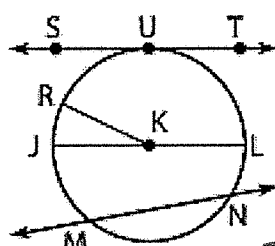
Identifying Terms Identify a chord, a secant, a diameter, a radius, and a point of tangency.

33.



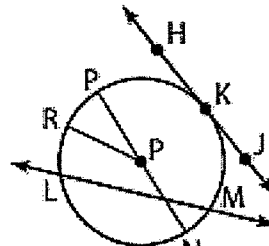
- ✓ Radius - $\overline{CF}, \overline{CE}$
- ✓ Secant - \overleftrightarrow{AG}
- ✓ Chord - \overline{EG}
- ✓ Tangent - \overleftrightarrow{AB}

34.



- ✓ Radius - $\overline{KR}, \overline{KJ}, \overline{KL}$
- ✓ Secant - \overleftrightarrow{ST}
- ✓ Chord - \overline{JL}
- ✓ Tangent - \overleftrightarrow{MN}

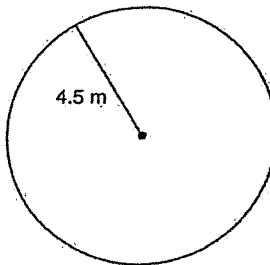
35.

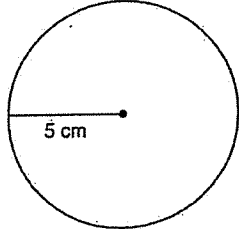


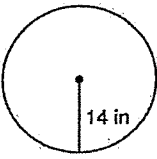
- ✓ Radius - $\overline{PP}, \overline{PR}, \overline{PN}$
- ✓ Secant - \overleftrightarrow{LM}
- ✓ Chord - \overline{LM}
- ✓ Tangent - \overleftrightarrow{HJ}

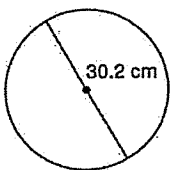
Circles

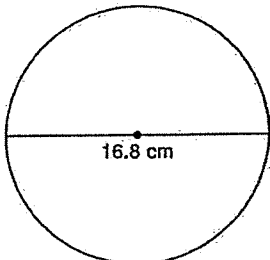
Find the circumference of each circle. Round to the nearest tenth.

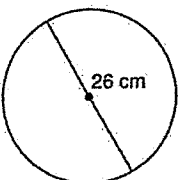
1)  $C = 2\pi r$
 $C = 9\pi m$
 $C = 28.26 m$

2)  $C = 2\pi r$
 $C = 10\pi cm$
 $C = 31.4 cm$

3)  $C = 2\pi r$
 $C = 28\pi in$
 $C = 87.92 in$

4)  $d = \underline{2r}$
 $C = 2\pi r$
 $C = d\pi = 30.2\pi cm$
 $C = 94.83 cm$

5)  $C = 16.8\pi cm$
 $C = 52.75 cm$

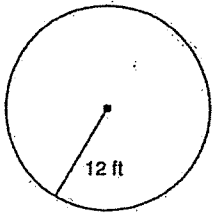
6)  $C = 26\pi cm$
 $C = 81.64 cm$

7) radius = 12 yd $C = 24\pi yd$
 $C = 75.36 yd$

8) radius = 5.5 mi $C = 11\pi yd$
 $C = 34.54 yd$

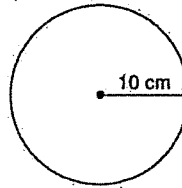
Find the area of each. Round to the nearest tenth.

9)



$$A = \pi r^2 = \pi (12)^2 = 144\pi \text{ ft}^2 = 452.16 \text{ ft}^2$$

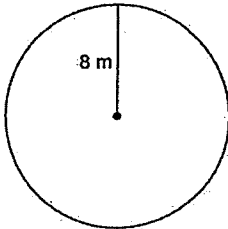
10)



$$A = 100\pi \text{ cm}^2$$

$$A = 314 \text{ cm}^2$$

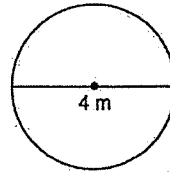
11)



$$A = 64\pi \text{ m}^2$$

$$A = 200.96 \text{ m}^2$$

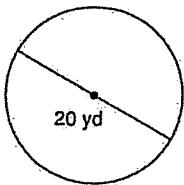
12)



$$A = 4\pi \text{ m}^2$$

$$A = 12.56 \text{ m}^2$$

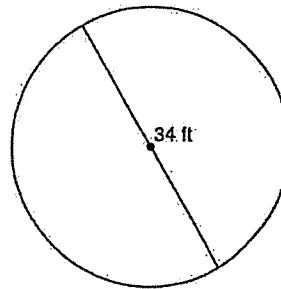
13)



$$A = 100\pi \text{ yd}^2$$

$$A = 314 \text{ yd}^2$$

14)



$$A = 289\pi \text{ ft}^2$$

$$A = 907.46 \text{ ft}^2$$

15) radius = 8 ft

$$A = 64\pi \text{ ft}^2$$

$$A = 200.96 \text{ ft}^2$$

16) radius = 5 cm

Find the diameter of each circle.

17) area = $4\pi \text{ in}^2$

$$A = \pi r^2$$

$$4\pi = \pi r^2$$

$$r^2 = 4 \Rightarrow r = 2 \quad \boxed{d = 4}$$

18) area = $49\pi \text{ yd}^2$

$$A = r^2\pi$$

$$r^2 = 49 \quad r = \sqrt{49} = 7$$

$$d = 7 \cdot 2 = \underline{\underline{14 \text{ yd}}}$$

19) circumference = $162\pi \text{ yd}$

$$C = 2\pi r$$

$$2\pi r = 162\pi \text{ yd}$$

$$d = \boxed{162 \text{ yd}}$$

20) circumference = $30\pi \text{ yd}$

$$\boxed{d = 30 \text{ yd}}$$