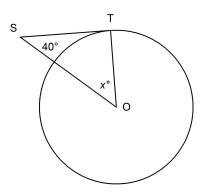
Circle Geometry Unit Test

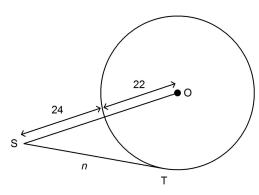
Multiple Choice

Identify the choice that best completes the statement or answers the question.

1. O is the centre of this circle and point T is a point of tangency. Determine the value of x° .



- 90°
- 50°
- 130°
- d. 40°
- 2. O is the centre of this circle and point T is a point of tangency. Determine the value of *n*. If necessary, give your answer to the nearest tenth.



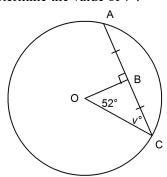
- 5.7
- b. 51
- c. 24
- d. 40.4
- 3. A circle has radius 7 cm. Which of the following measures could NOT be the length of a chord in the circle: 2 cm, 11 cm, 14 cm, or 17 cm?
 - 17 cm a.

2 cm

11 cm b.

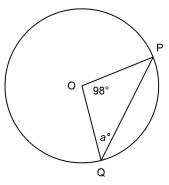
d. 14 cm

4. O is the centre of the circle. Determine the value of v° .



- a. 19°
- b. 71°
- c. 52°
- d. 38°

5. O is the centre of the circle. Determine the value of a° .



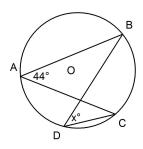
- a. 49°
- b. 20.5°
- c. 41°
- d. 69.5°
- 6. O is the centre of the circle.

 Determine the value of z to the nearest tenth, if necessary.

0 2 L

- a. 4.5
- b. 3.6
- c. 5
- d. 1

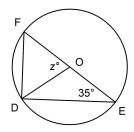
7. O is the centre of this circle. Determine the value of x° .



- a. 44°
- b. 90°

- c. 180°
- d. 88°

8. O is the centre of this circle. Determine the value of z° .



- a. 55°
- b. 110°

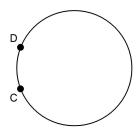
- c. 90°
- d. 70°

Short Answer

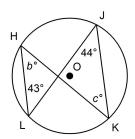
9. Draw a line through point P that is a tangent to the circle. Label the point of tangency Q.



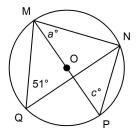
P ● 10. Label the major arc CD and the minor arc CD of this circle.



11. Point O is the centre of the circle. Determine the values of b° and c° .



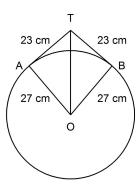
12. Point O is the centre of the circle. Determine the values of a° and c° .



Problem

13. A circular mirror with radius 27 cm hangs from a hook.

The wire is 46 cm long and is a tangent to the circle at points A and B. How far, to the nearest tenth, above the top of the mirror is the hook?



14. A pedestrian underpass is constructed using a cylindrical pipe of radius 2.6 m. The bottom of the pipe will be filled and paved. The headroom at the centre of the path is 3.9 m. How wide is the path to the nearest tenth of a metre?

