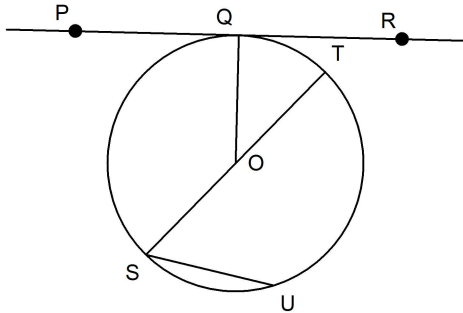


Math 9 Accelerated - Exam Review: Chapter 8

Multiple Choice

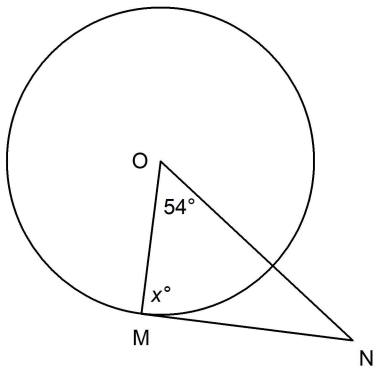
Identify the choice that best completes the statement or answers the question.

1. O is the centre of this circle.
Which line is a tangent?



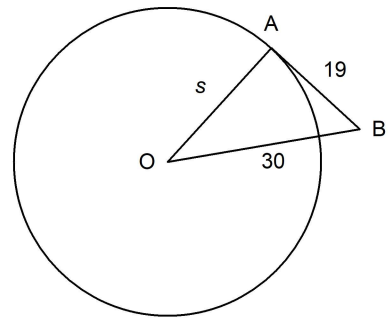
- A OQ
- B ST
- C PR
- D SU

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



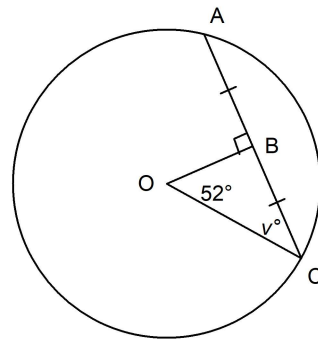
- A 54°
- B 90°
- C 126°
- D 36°

3. O is the centre of this circle and point A is a point of tangency.
Determine the value of b . If necessary, give your answer to the nearest tenth.



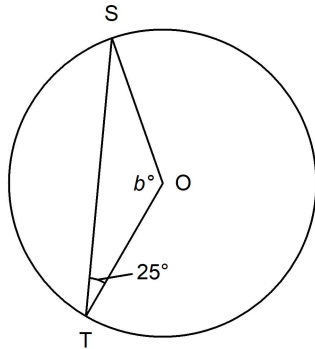
- A 5.5
- B 11
- C 23.2
- D 35.5

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



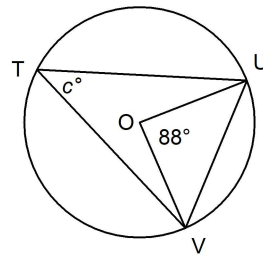
- A 19°
- B 71°
- C 52°
- D 38°

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



- A 65°
B 77.5°
C 130°
D 25°

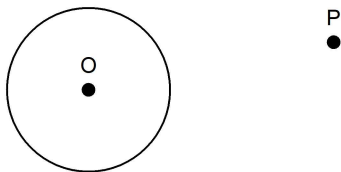
6. O is the centre of this circle.
Determine the value of c° .



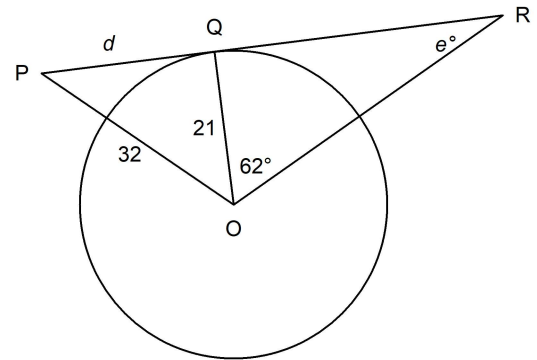
- A 90°
B 44°
C 180°
D 88°

Short Answer

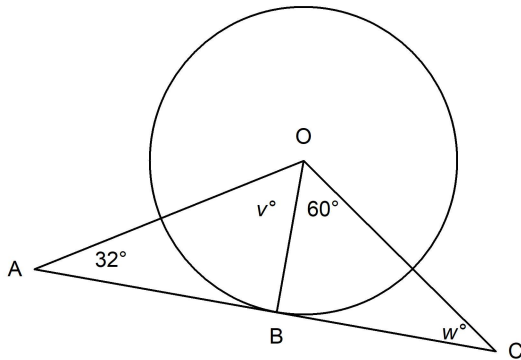
7. Draw a line through point P that is a tangent to the circle.
Label the point of tangency Q.



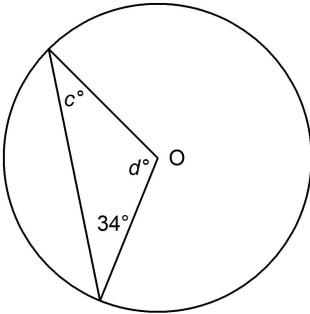
9. O is the centre of this circle and point Q is a point of tangency.
Determine the values of d and e° . If necessary, give your answers to the nearest tenth.



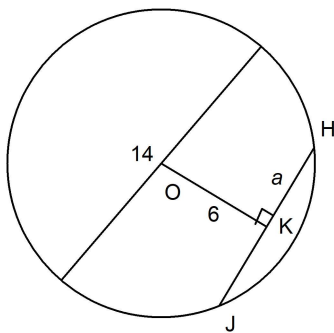
8. O is the centre of this circle and point B is a point of tangency.
Determine the values of v° and w° .



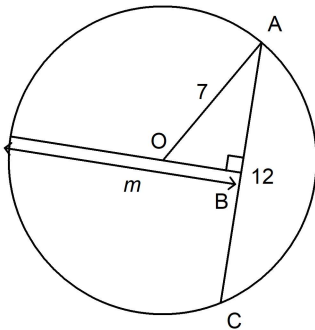
10. Point O is the centre of this circle.
Determine the values of c° and d° .



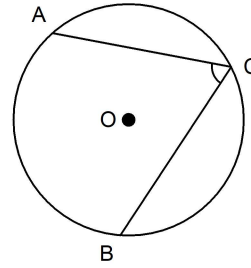
11. Point O is the centre of this circle. Determine the value of a .



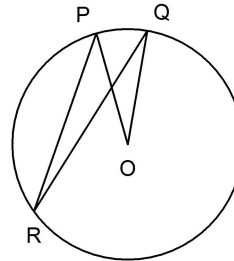
12. Point O is the centre of this circle.
Determine the value of m to the nearest tenth, if necessary.



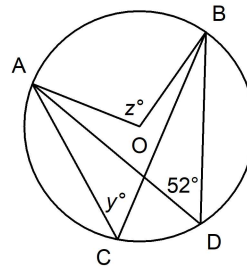
13. O is the centre of this circle. Is $\angle ACB$ a central angle or an inscribed angle?



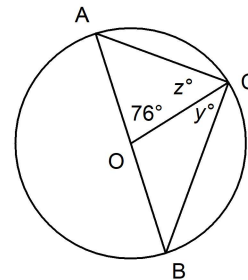
14. O is the centre of this circle.
In this circle, identify the inscribed angle and the central angle subtended by the same minor arc.



15. Point O is the centre of this circle.
Determine the values of y° and z° .

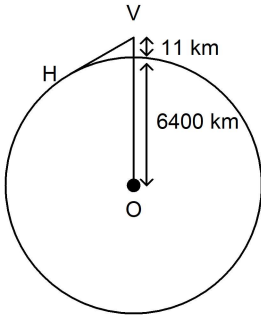


16. Point O is the centre of the circle.
Determine the values of y° and z° .

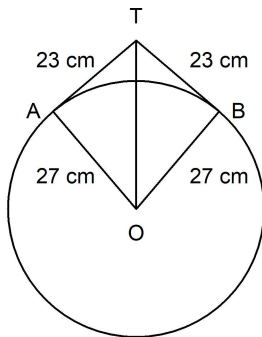


Problem

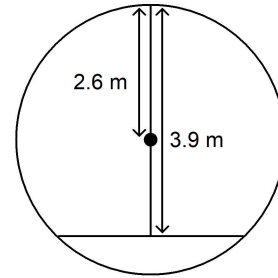
17. A Ruppell's Griffon Vulture holds the record for the bird with the highest documented flight altitude. It was spotted at a height of about 11 km above the Earth's surface. The radius of Earth is approximately 6400 km. How far was the vulture from the horizon, H ? Calculate this distance to the nearest kilometre.



18. 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?



19. 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?



20. Point O is the centre of the circle. Determine the values of x° , y° , and z° .

