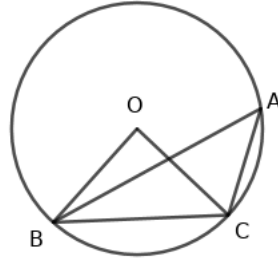


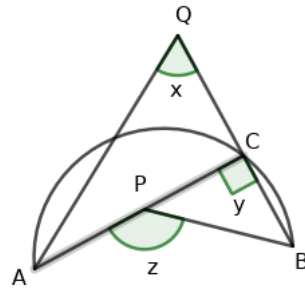
1 മാർക്കിന്റെ ചോദ്യങ്ങൾ : ചില മാതൃകകൾ

1) Triangle OBC is an equilateral triangle, O is the centre of the circle. What is the measure of $\angle BAC$?



- (a) 60° (b) 50° (c) 30° (d) 36°

2) x, y, z are the angles outside the semicircle, on the semicircle and inside the semicircle. If these are in an arithmetic sequence then what is $x + z$?

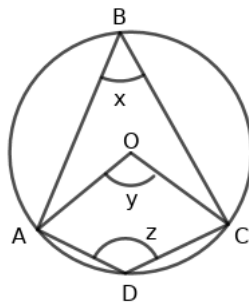


- (a) 100° (b) 50° (c) 180° (d) 360°

3) Which of the following is not a cyclic quadrilateral?

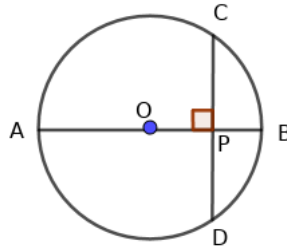
- (a) ചതുരം (b) സമചതുരം (c) സമപാർശ്വലംബകം (d) സമളജസാമാന്തരീകം

4) In the figure O is the centre of the circle. If x, y, z are in arithmetic sequence then what is y ?



- (a) 80° (b) 90° (c) 50° (d) 25°

- 5) O is the centre of the circle with diameter AB . The chord CD is perpendicular to AB . If $PA = a, PB = b$ then what is CD ?



- (a) \sqrt{ab} (b) $\sqrt{2ab}$ (c) $\sqrt{4ab}$ (d) $\sqrt{3ab}$
- 6) If $x - 1$ is a factor of $ax^3 + bx^2 + cx + d$ then what is $a + b + c + d$?
- (a) 1 (b) 0 (c) -1 (d) 2
- 7) In the polynomial $p(x)$ then what is a factor of $p(x) - p(1)$?
- (a) $x + 1$ (b) $x - 1$ (c) x (d) $x + 2$
- 8) Which is the first degree common factor of $x^3 + 1$ and $x^3 + x^2 + x + 1$?
- (a) $x - 1$ (b) $x + 1$ (c) $2x - 1$ (d) $x + 2$
- 9) If $x^2 - 7x + 12 = (x - 3)(x + a)$ then what is a ?
- (a) 2 (b) 3 (c) -4 (d) -1
- 10) $p(x) = x^3 + x^2 + x + k$ is a polynomial. If $x + 1$ is a factor then what is k ?
- (a) 2 (b) 0 (c) 1 (d) -1