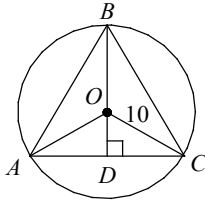


Exercise - Regular Polygons

Questions 1 - 4 refer to the following information.



The figure above is an equilateral inscribed in a circle with radius 10.

1

What is the measure of $\angle AOC$?

2

What is the length of OD ?

3

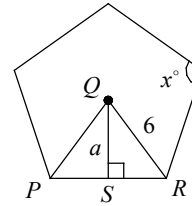
What is the length of BD ?

4

What is the area of $\triangle ABC$?

- A) $45\sqrt{3}$
- B) $50\sqrt{3}$
- C) $60\sqrt{3}$
- D) $75\sqrt{3}$

Questions 5 - 7 refer to the following information.



The figure above is a regular pentagon whose radius is 6.

5

What is the value of x ?

6

What is the measure of $\angle RQS$?

7

Which of the following equations can be used to find the value of a ?

- A) $\sin \angle RQS = \frac{a}{6}$
- B) $\cos \angle RQS = \frac{a}{6}$
- C) $\sin \angle RQS = \frac{6}{a}$
- D) $\cos \angle RQS = \frac{6}{a}$