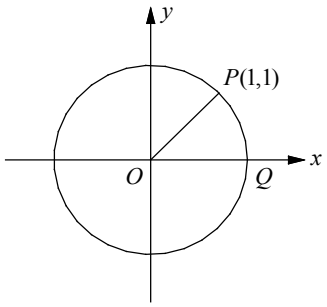
Exercises - The Radian Measure of an Angle

1



In the xy- plane above, O is the center of the circle, and the measure of $\angle POQ$ is $k\pi$ radians. What is the value of k?

A) $\frac{1}{6}$

B) $\frac{1}{4}$

C) $\frac{1}{3}$

D) $\frac{1}{2}$

2

Which of the following is equal to $\cos(\frac{\pi}{8})$?

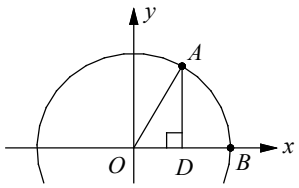
A) $\cos(\frac{3\pi}{8})$

B) $\cos(\frac{7\pi}{8})$

C) $\sin(\frac{3\pi}{8})$

D) $\sin(\frac{7\pi}{8})$

3



In the xy- plane above, O is the center of the circle and the measure of $\angle AOD$ is $\frac{\pi}{3}$. If the radius of circle O is 6 what is the length of AD?

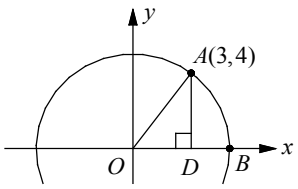
A) 3

B) $3\sqrt{2}$

C) 4.5

D) $3\sqrt{3}$

4



In the figure above, what is the value of $\cos\angle AOD$?

A) $\frac{3}{5}$

B) $\frac{3}{4}$

C) $\frac{4}{5}$

D) $\frac{4}{3}$