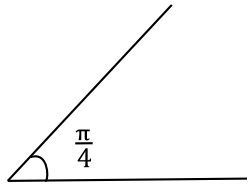
Questions Angles Arcs And Trig

1) In the diagram below, angle X is measured in radians. What is angle X in degrees? *(no calculator)*

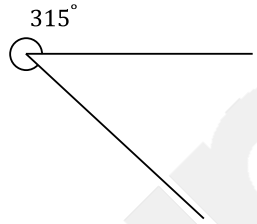


A) $30°$
B) $60°$
C) $45°$
D) $55°$

2) What is the value of $\cos 225°$? *(no calculator)*

A) $-\frac{\sqrt{2}}{2}$
B) 2
C) $-\sqrt{2}$
D) $\frac{\sqrt{2}}{2}$

3) The angle below has a measure of 315 degrees. What is the measure of this angle in radians? *(no calculator)*



A) $\frac{\pi}{4}$
B) $\frac{5\pi}{4}$
C) $\frac{7\pi}{4}$
D) $\frac{5\pi}{6}$

4) If the measure of $\theta = \frac{4\pi}{6}$, then what is the measure of θ in degrees? *(no calculator)*

A) $10°$
B) $120°$
C) $60°$
D) $90°$

5) The measure of an angle is $\frac{11\pi}{6}$. What is the value of the tan of this angle? *(no calculator)*

A) 1
B) undefined
C) $\frac{\sqrt{3}}{2}$
D) $-\frac{\sqrt{3}}{3}$

6) Which of the following trig functions are equal to the same as *cos* $90°$?*(no calculator)*

A) $\sin(60^{\circ})$
B) $\sin(120^{\circ})$
C) $\sin(\frac{7\pi}{6})$
D) $\sin(\pi)$

7) What is the value of $\tan 60°$? *(no calculator)*

A) 1
B) $\frac{\sqrt{3}}{2}$
C) $\sqrt{3}$
D) $\sin(\pi)$

8) Which of the following has a value of undefined *(no calculator)*

A) $\tan(90^{\circ})$
B) $\cos(\frac{\pi}{6})$
C) $\sin(\frac{7\pi}{6})$
D) $\tan(225^{\circ})$

9) If the measure of $\theta = 60°$, then what is the measure of θ in radians? *(no calculator)*

A) $\frac{2\pi}{3}$

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

C) $\frac{7\pi}{6}$

D) $\frac{\pi}{6}$

10) What is the value of $\sin\frac{3\pi}{2}$? *(no calculator)*

A) $\frac{\sqrt{3}}{2}$

B) 0

C) - 1

D) undefined