

Unit Circle Quiz PDF

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What is the value of $\tan(\pi)$?

- 0
- 1
- Undefined
- 1

What is the radius of the unit circle?

- 0
- 1
- π
- 2

What is the cosine of $\pi/2$ radians?

- 0
- 1
- 1
- $\sqrt{2}/2$

What is the period of the sine function?

- π
- 2π
- 4π
- $\pi/2$

Which trigonometric function is undefined at $\pi/2$?

- Sine
- Cosine

- Tangent
- Secant

In which quadrant is the angle $3\pi/4$ located?

- First
- Second
- Third
- Fourth

Which of the following angles corresponds to the point (1, 0) on the unit circle?

- $\pi/2$
- π
- 0
- $3\pi/2$

Describe how the unit circle can be used to find the sine and cosine of an angle.

How do the coordinates of points on the unit circle relate to the values of trigonometric functions?

Discuss the significance of symmetry in the unit circle and how it affects trigonometric functions.

Which of the following are the coordinates of the point at $\pi/4$ radians on the unit circle?

- $(\sqrt{2}/2, \sqrt{2}/2)$
- $(1, 0)$
- $(0, 1)$
- $(-1, 0)$

Provide a real-world example where the unit circle is used to model a periodic phenomenon.

Which angles have a cosine value of 0?

- $\pi/2$
- π
- $3\pi/2$
- 2π

Which of the following angles are located in the fourth quadrant?

- $7\pi/4$
- $\pi/4$
- $5\pi/3$
- $3\pi/2$

Which of the following are properties of the unit circle?

- Radius of 1
- Centered at the origin
- Circumference of π
- Used to define trigonometric functions

What is the relationship between radians and degrees, and how can you convert between them?

Explain why the unit circle is important in trigonometry.

What is the sine of π radians?

- 1
- 0
- 1
- $\sqrt{3}/2$

Select all angles that have a sine value of 1.

- $\pi/2$
- π
- $3\pi/2$
- 2π

Which trigonometric functions are even?

- Sine
- Cosine
- Tangent
- Secant