

MAT 120

Quiz 4

Fall 2024

1. Which angle has the same terminal point as $7\pi/2$:

- a) 0 b)
- $-\pi/2$
- c)
- $-3\pi/2$
- d)
- $-\pi$
- e)
- $-\pi/4$

Correct Answer: $-\pi/2$ 2. Which angle has the same terminal point as $17\pi/4$:

- a) 0 b)
- $-\pi/2$
- c)
- $-3\pi/2$
- d)
- $-\pi$
- e)
- $\pi/4$

Correct Answer: $\pi/4$ 3. Find $\cos(3\pi/4)$:

- a) 0 b)
- $-\frac{\sqrt{2}}{2}$
- c)
- $\frac{\sqrt{2}}{2}$
- d)
- $\frac{\sqrt{3}}{2}$
- e)
- $-\frac{\sqrt{3}}{2}$

Correct Answer: $-\frac{\sqrt{2}}{2}$ 4. Find $\cos(3\pi/2)$:

- a) 0 b)
- $\frac{\sqrt{2}}{2}$
- c)
- $\frac{\sqrt{3}}{2}$
- d)
- $-\frac{\sqrt{2}}{2}$
- e)
- $-\frac{\sqrt{3}}{2}$

Correct Answer: 0

5. Find $\sin(5\pi/6)$:

- a) 0 b)
- $\frac{\sqrt{2}}{2}$
- c)
- $\frac{\sqrt{3}}{2}$
- d)
- $-\frac{\sqrt{2}}{2}$
- e)
- $\frac{1}{2}$

Correct Answer: $\frac{1}{2}$ 6. What is the period of the function: $\sin(8\pi t)$?

- a) 4 b) 5 c) 0.2 d) 0.25 e) 1

Correct Answer: 0.25

7. What is the frequency of the function: $\sin(8\pi t)$?

- a) 4 b) 5 c) 0.2 d) 0.25 e) 1

Correct Answer: 0.25

8. Find $\sin(x) + \sin(-x)$ for any real number x :

- a)
- $2\sin(x)$
- b)
- $-2\sin(x)$
- c)
- $-\sin(x)$
- d) 0 e) 1

Correct Answer: 0

9. Find $\cos(x) + \cos(-x)$ for any real number x :

- a)
- $2\cos(x)$
- b)
- $-2\cos(x)$
- c)
- $-\cos(x)$
- d) 0 e) 1

Correct Answer: $2\cos(x)$ 10. Find $\sin^2(-\pi/4) + \cos^2(3\pi/4)$:

- a) 1 b) 0 c)
- $\frac{\sqrt{2}}{2}$
- d)
- $\frac{\sqrt{3}}{2}$
- e)
- -1

Correct Answer: 1