MICHIGAN ALGEBRA 2 · UNIT 3 · 10 QUESTIONS

Exponential, Logarithmic, and Trigonometric Functions — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **The solution of $\log_5 x = 2$ is**

- A 25
- B 7
- C 32
- D 10

Understand It with Pulse | Flag a mistake

2 **A bank balance of 1000 dollars grows by 5% each year. After 2 years, the balance, in dollars, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 The exact value of $\sin(\pi/3)$ is

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

Understand It with Pulse | Flag a mistake

4 The exact value of $\cos(\pi/6)$ is

- A 0
- B $\frac{1}{2}$
- C $\sqrt{\frac{2}{2}}$
- D $\sqrt{\frac{3}{2}}$

Understand It with Pulse | Flag a mistake

5 **An angle of 210° has a reference angle of**

A 30°

B 60°

C 150°

D 210°

Understand It with Pulse | Flag a mistake

6 **An angle of -60° is coterminal with**

A 120°

B 300°

C 240°

D 60°

Understand It with Pulse | Flag a mistake

7 **The period of y = cos(3x) is**

A 2π

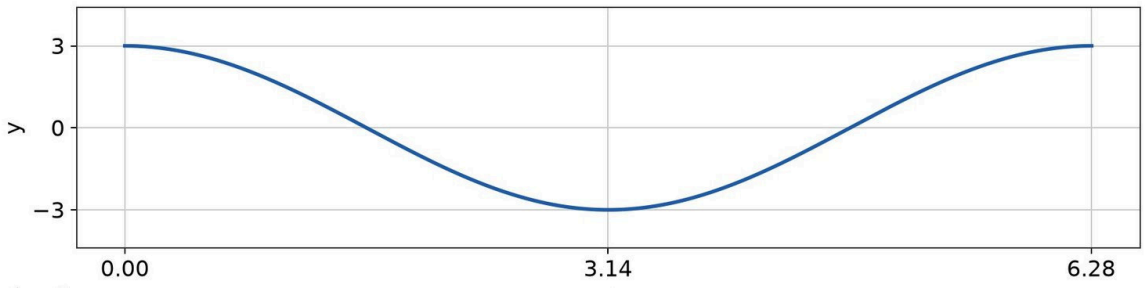
B π/3

C 3π

D 2π/3

Understand It with Pulse | Flag a mistake

8 **The graph below shows y = 3cos x. The maximum value of the function is**



- **A** 6
- **B** 1
- **C** 2
- **D** 3

Understand It with Pulse | Flag a mistake

9 **The number of solutions of cos x = 0 on 0 ≤ x < 2π is**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **If $\tan\theta = 1$ and θ is in Quadrant I, then $\sin\theta$ is**

A $\frac{1}{2}$

B $\sqrt{\frac{3}{2}}$

C $\sqrt{\frac{2}{2}}$

D 1

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	A	**5.**	A	**9.**	2
2.	1102.5	**6.**	B	**10.**	C
3.	D	**7.**	D		
4.	D	**8.**	D		

© 2026 Brett Robbins. All Rights Reserved.