ARKANSAS ALGEBRA II · 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 value of cos 30° is**

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

Understand It with Pulse | Flag a mistake

2 The amplitude of $y = 5\cos x$ is

- A 1
- B 10
- C 5
- D 2

Understand It with Pulse | Flag a mistake

3 The period of $y = \sin 4x$ is

- A 2π
- B 4π
- C π
- D $\frac{\pi}{2}$

Understand It with Pulse | Flag a mistake

4 The solution of $3^{x-1} = 27$ is

- A 4
- B 3
- C 9
- D 2

Understand It with Pulse | Flag a mistake

5 The value of $\log_{10} 10 + \log_{10} 1000$ is

- A 3
- B 4
- C 10000
- D 2

Understand It with Pulse | Flag a mistake

6 **A population starts at 100 and doubles every 4 hours After 12 hours, the population is**

- A 300
- B 400
- C 800
- D 1600

Understand It with Pulse | Flag a mistake

7 **An angle of 90° measures, in radians**

- A π
- B 2π
- C 1
- D $\frac{\pi}{2}$

Understand It with Pulse | Flag a mistake

8 The solution of $\log_3 x = 3$ is

- **A** 27
- **B** 9
- **C** 81
- **D** 3

Understand It with Pulse | Flag a mistake

9 The solution of $2^x = 64$ is ____

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **An exponential function passes through (0, 2) and (1, 10). Its base is**

- **A** 2
- **B** 10
- **C** 5
- **D** 20

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

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