KANSAS 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 $\sin(\frac{\pi}{3})$ is**



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

B 1

C $\frac{1}{2}$

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

Understand It with Pulse | Flag a mistake

4 **The exact value of $\cos(\frac{\pi}{6})$ is**

A 0

B $\frac{1}{}$

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

D $\frac{\sqrt{3}}{}$

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



A 30°

B 60°

C 150°

D 210°

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

A 120°

B 300°

C 240°

D 60°

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

A 2π

B π

C 3π

D 2π

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

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

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

ANSWER _____

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

A $\frac{1}{}$

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

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

D 1

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ANSWER KEY

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

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