ALASKA 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 **An amount of 500 dollars grows by 10% each year. After 2 years it is**

- A 600 dollars
- B 550 dollars
- C 605 dollars
- D 510 dollars

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2 **A sample of 120 grams has a half-life of 8 years. After 16 years, how many grams remain?**

- **A** 60
- **B** 30
- **C** 15
- **D** 90

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3 **The value of sin 90° is**

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

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4 **The value of cos 0° is**

A 0

B -1

C 1

D $\frac{1}{2}$

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5 **The value of tan 30° is**

A 1

B $\sqrt{3}$

C $\frac{\sqrt{3}}{3}$

D $\frac{1}{2}$

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6 The amplitude of $y = 4 \cos x$ is

- A 2
- B 4
- C 1
- D 8

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

- A 2π
- B π
- C $\frac{2\pi}{3}$
- D 3π

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8 **The reference angle for 210° is**

- **A** 210°
- **B** 150°
- **C** 30°
- **D** 60°

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9 **If $\sin\theta = \frac{5}{13}$ and θ is in Quadrant I, then $\cos\theta$ is**

- **A** $\frac{12}{13}$
- **B** $\frac{5}{12}$
- **C** $\frac{13}{12}$
- **D** $-\frac{12}{13}$

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10 **The solution of $2^x = 32$ is**

ANSWER

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ANSWER KEY

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

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