DELAWARE PRECALCULUS · UNIT 2 · 10 QUESTIONS

Trigonometry — 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 **In a right triangle, the side opposite an acute angle is 9, the adjacent side is 12, and the hypotenuse is 15. The tangent of the angle is**

A $\frac{9}{12}$

B $\frac{12}{9}$

C $\frac{9}{15}$

D $\frac{12}{15}$

Understand It with Pulse | Flag a mistake

2 In a right triangle, the side opposite an acute angle is 9, the adjacent side is 12, and the hypotenuse is 15. The sine of the angle is

- **A** $\frac{12}{15}$
- **B** $\frac{9}{12}$
- **C** $\frac{9}{15}$
- **D** $\frac{15}{9}$

Understand It with Pulse | Flag a mistake

3 In a 45-45-90 triangle, each leg is 7. The hypotenuse is

- **A** 14
- **B** $7\sqrt{3}$
- **C** 7
- **D** $7\sqrt{2}$

Understand It with Pulse | Flag a mistake

4 The value of sin 0° is

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

Understand It with Pulse | Flag a mistake

5 The value of cos 0° is

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

Understand It with Pulse | Flag a mistake

6 In a right triangle, the side opposite an acute angle is 6, the adjacent side is 8, and the hypotenuse is 10. The sine of the angle is

- **A** $\frac{6}{10}$
- **B** $\frac{8}{10}$
- **C** $\frac{6}{8}$
- **D** $\frac{10}{6}$

Understand It with Pulse | Flag a mistake

7 The value of sin 45° is

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

Understand It with Pulse | Flag a mistake

8 In a right triangle, the side opposite an acute angle is 8, the adjacent side is 15, and the hypotenuse is 17. The cosine of the angle is

- **A** $\frac{8}{17}$
- **B** $\frac{15}{8}$
- **C** $\frac{15}{17}$
- **D** $\frac{17}{15}$

Understand It with Pulse | Flag a mistake

9 In a 45-45-90 triangle, each leg is 2. The hypotenuse is

- **A** 4
- **B** $2\sqrt{3}$
- **C** 2
- **D** $2\sqrt{2}$

Understand It with Pulse | Flag a mistake

10 **The value of cos 45° is**

A 1

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

C $\frac{1}{2}$

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

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.