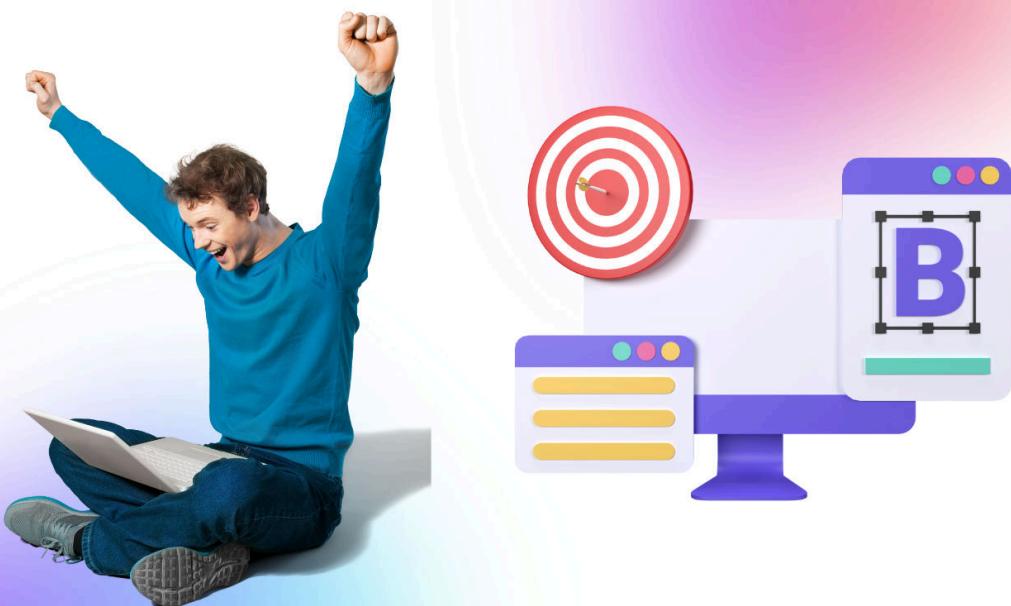


# TRIGONOMETRY FORMULA

Trigonometry studies the relationship between the angles and sides of a triangle and is one of the most essential concepts of mathematics and geometry. Using the functions, formulas, and identities of the trigonometric calculations, you find the unknown or missing angles of the sides of a right-angled triangle. All mathematical concepts require trigonometric calculations, one of the most effective things in mathematical geometry.

[Read more](#)

**Q1: In the right-angled triangle, if one acute angle is 30, what is the value of the other acute angle?**

- A: 45
  - B: 60
  - C: 90
  - D: 30
- 

**Q2: Which of the following is a Pythagorean triple?**

- A: (3, 4, 5)
  - B: (1, 2, 3)
  - C: (5, 6, 7)
  - D: (2, 3, 4)
- 

**Q3: Which trigonometric function is negative in the third quadrant of the unit circle?**

- A: Sine (sin)
  - B: Cosine (cos)
  - C: Tangent (tan)
  - D: Cotangent (cot)
- 

**Q4: What is the Formula for  $\sin(A + B)$ ?**

- A:  $\sin A \cos B$
  - B:  $\cos A \sin B$
  - C:  $\sin A \cos B + \cos A \sin B$
  - D:  $\sin A \cos B - \cos A \sin B$
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**Q5: What is the Formula for  $\cos(A - B)$ ?**

- A:  $\cos A \cos B - \sin A \sin B$
  - B:  $\sin A \sin B$
  - C:  $\cos A \cos B$
  - D:  $\cos A \cos B + \sin A \sin B$
-

## Q6: What is the exact formula of the Pythagorean Identity?

- A:  $\sin^2\theta + \cos^2\theta = 1$
  - B:  $\sin^2\theta + \cos^2\theta$
  - C:  $\sin^2\theta + \cos^2\theta = 0$
  - D:  $\sin^2\theta + \cos^2\theta = -1$
- 

## Q7: What is the formula for Tan (A - B)?

- A:  $(\tan A - \tan B) - (1 + \tan A \tan B)$
  - B:  $(\tan A - \tan B) + (1 + \tan A \tan B)$
  - C:  $(\tan A - \tan B) / (1 + \tan A \tan B)$
  - D:  $(\tan A - \tan B)$
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## Q8: What are the fields where trigonometry is used?

- A: Engineering
  - B: Physics
  - C: Computer Science
  - D: All of these
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## Q9: A monument is at a distance of 180 ft from a particular point. Calculate the height of the building if $\tan\theta = 4/3$ and use other trigonometric functions.

- A: 200 ft
  - B: 240 ft
  - C: 210 ft
  - D: 100 ft
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## Q10: What are the major trigonometric function formulas?

- A: Secant
  - B: Cosecant
  - C: Tangent
  - D: All of these
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## Answers

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**Q1:** B - 60

**Q2:** A - (3, 4, 5)

**Q3:** A - Sine (sin)

**Q4:** C -  $\sin A \cos B + \cos A \sin B$

**Q5:** D -  $\cos A \cos B + \sin A \sin B$

**Q6:** A -  $\sin^2 \theta + \cos^2 \theta = 1$

**Q7:** C -  $(\tan A - \tan B) / (1 + \tan A \tan B)$

**Q8:** D - All of these

**Q9:** B - 240 ft

**Q10:** D - All of these