

KHAN'S ACADEMY

Trigonometry MCQs for practice

When we see at a lower level, from the horizontal line, angle formed is

- A) Angle of elevation
- B) Angle of depression
- C) Straight angle
- D) 0°

Complete the following

$$\operatorname{cosec} \theta = \frac{\text{Hypotenuse}}{?}$$

- A) Adjacent side
- B) Opposite side
- C) Hypotenuse
- D) None of these

$$\sec \theta \times \cos \theta = 1$$

- A) True
- B) False

$$1 + \cot^2 \theta = ?$$

- A) $\sin^2 \theta$
- B) $\tan^2 \theta$
- C) $\sec^2 \theta$
- D) $\operatorname{cosec}^2 \theta$

$$\cot 60 = ?$$

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

$$\text{If } \sin \theta = \frac{3}{5} \text{ then } \cos \theta = ?$$

- A) 1
- B) $\frac{3}{2}$
- C) $\frac{4}{5}$
- D) $\frac{6}{10}$

$$\text{If } \sec \theta = \frac{2}{\sqrt{3}} \text{ then the value of } 1 + \operatorname{cosec} \theta \text{ is?}$$

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

$$\text{If } \tan \theta = \frac{24}{7} \text{, Find the value of } \cos \theta \text{. If } \sin \theta = \frac{3}{5} \text{ then } \tan \theta = ?$$

- A) $\frac{25}{7}$
- B) $\frac{7}{25}$
- C) $\frac{24}{25}$
- D) $\frac{25}{24}$

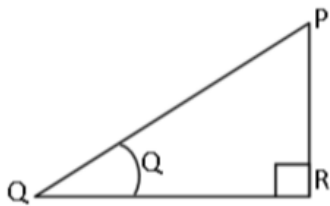
- A) 1
- B) $\frac{4}{5}$
- C) $\frac{4}{3}$
- D) $\frac{3}{4}$

Which of the following is correct trigonometric identity ?

- A) $\sin^2 \theta = 1 + \cos^2 \theta$
- B) $1 + \cot^2 \theta = \tan^2 \theta$
- C) $1 + \tan^2 \theta = \sec^2 \theta$
- D) $1 + \operatorname{cosec}^2 \theta = \cot^2 \theta$

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From the figure alongside, find $\tan Q$.



- A) $\frac{PR}{PQ}$
- B) $\frac{PR}{QR}$
- C) $\frac{QR}{PR}$
- D) $\frac{QR}{PQ}$

The identity $\sin^2\theta + \cos^2\theta = 1$ holds true when

- A) Value of θ is 90°
- B) Value of θ is 0°
- C) θ is an acute angle
- D) All values of θ .

Select the correct option $\frac{1}{\sec\theta - \tan\theta} = ?$

- A) $\sec\theta - \tan\theta$
- B) $\tan\theta - \sec\theta$
- C) $\sin\theta - \cos\theta$
- D) $\sec\theta + \tan\theta$

$\frac{5}{\cos\theta} - \frac{12}{\sin\theta} = 0$. Find value of $\sec\theta$.

- A) $\frac{12}{5}$
- B) $\frac{5}{12}$
- C) $\frac{13}{5}$
- D) $\frac{4}{12}$

What is the value of $\frac{\text{adjacent side}}{\text{opposite side}}$

- A) $\tan\theta$
- B) $\sin\theta$
- C) $\cot\theta$
- D) $\sec\theta$

If the value of $\cot\theta + \frac{1}{\cot} = 2$

Then the value of $\cot^2\theta + \frac{1}{\cot^2\theta}$ is ?

- A) 4
- B) $\sqrt{2}$
- C) 2
- D) 1

$\cot\theta = \frac{40}{9}$, $\sin\theta = ?$

- A) $\frac{41}{40}$
- B) $\frac{9}{40}$
- C) $\frac{41}{9}$
- D) $\frac{9}{41}$

The value of $(1 - \sin^2\theta)(1 + \tan^2\theta)$ is

- A) 1
- B) $\cos\theta$
- C) $\tan\theta$
- D) $\sin\theta$

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If $\tan \theta = 1$. Find the value of $\operatorname{cosec} \theta + \sec \theta$.

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

Which of the following is true?

- A) $\operatorname{cosec} \theta = \frac{1}{\tan \theta}$
- B) $\operatorname{cosec} \theta = \frac{1}{\cot \theta}$
- C) $\operatorname{cosec} \theta = \frac{1}{\sec \theta}$
- D) $\operatorname{cosec} \theta = \frac{1}{\sin \theta}$

If $\tan \theta = \sqrt{3}$. Find the value of $\operatorname{cosec} \theta$.

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

If $\tan \theta = \frac{5}{12}$ then find the value of $\cos \theta$

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

If $8 \sec \theta - 15 \operatorname{cosec} \theta = 0$. Find the value of $\cos \theta$.

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

If $\cos \theta = \frac{12}{13}$ Find the value of $\cot \theta = ?$

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