

Class 10 Maths Chapter 8 Introduction to Trigonometry MCQs For Practice

1. The value of $(\sin 30^\circ + \cos 30^\circ) - (\sin 60^\circ + \cos 60^\circ)$ is

- (a) -1
- (b) 0
- (c) 1
- (d) 2

2. If $\cos A = 4/5$, then the value of $\tan A$ is

- (a) $3/5$
- (b) $3/4$
- (c) $4/3$
- (d) $5/3$

3. The value of $(\tan 30^\circ)/(\cot 60^\circ)$ is

- (a) $1/\sqrt{2}$
- (b) $1/\sqrt{3}$
- (c) $\sqrt{3}$
- (d) 1

4. If $\sin \theta - \cos \theta = 0$, then the value of $(\sin^4 \theta + \cos^4 \theta)$ is

- (a) 1
- (b) $3/4$
- (c) $1/2$
- (d) $1/4$

5. Given that $\sin \alpha = 1/2$ and $\cos \beta = 1/2$, then the value of $(\alpha + \beta)$ is

- (a) 0°
- (b) 30°
- (c) 60°
- (d) 90°

6. The value of the expression $[\cos^2(23^\circ) - \sin^2(67^\circ)]$ is equal to

- (a) 0
- (b) 1
- (c) $1/2$
- (d) $1/4$

7. $\sin(45^\circ + \theta) - \cos(45^\circ - \theta)$ is equal to

- (a) $2 \cos \theta$
- (b) 0
- (c) $2 \sin \theta$
- (d) 1

8. If $\tan \theta = 3/4$, then $(4 \sin \theta - \cos \theta)/(4 \sin \theta + \cos \theta)$ is equal to

- (a) $2/3$
- (b) $1/3$
- (c) $1/2$

(d) $3/4$

9. If $\sin \theta + \cos \theta = \sqrt{3}$, then $\tan \theta + \cot \theta$ is equal to

- (a) 1
- (b) 0
- (c) $2\sqrt{3}$
- (d) $1/3$

10. The value of $(\sin 47^\circ)/(\cos 43^\circ)$ is equal to

- (a) 0
- (b) $1/2$
- (c) 1
- (d) 2

***** ANSWER KEY *****

1 - (b)
6 - (a)

2 - (b)
7 - (b)

3 - (d)
8 - (c)

4 - (c)
9 - (a)

5 - (d)
10 - (c)

