

Fundamental Identities Quiz B

Fill in each blank with the correct trigonometric function.

I. Cofunction Identities

1. $\sin\left(\frac{\pi}{2} - \theta\right) = \underline{\hspace{2cm}}$

2. $\csc\left(\frac{\pi}{2} - \theta\right) = \underline{\hspace{2cm}}$

3. $\tan\left(\frac{\pi}{2} - \theta\right) = \underline{\hspace{2cm}}$

4. $\sec\left(\frac{\pi}{2} - \theta\right) = \underline{\hspace{2cm}}$

5. $\cot\left(\frac{\pi}{2} - \theta\right) = \underline{\hspace{2cm}}$

6. $\cos\left(\frac{\pi}{2} - \theta\right) = \underline{\hspace{2cm}}$

II. Even/Odd Identities

7. $\csc(-\theta) = \underline{\hspace{2cm}}$

8. $\sin(-\theta) = \underline{\hspace{2cm}}$

9. $\cot(-\theta) = \underline{\hspace{2cm}}$

10. $\cos(-\theta) = \underline{\hspace{2cm}}$

11. $\tan(-\theta) = \underline{\hspace{2cm}}$

12. $\sec(-\theta) = \underline{\hspace{2cm}}$

III. Quotient Identities

13. $\frac{\cos\theta}{\sin\theta} = \underline{\hspace{2cm}}$

14. $\frac{\sin\theta}{\cos\theta} = \underline{\hspace{2cm}}$

IV. Reciprocal Identities

15. $\frac{1}{\cot\theta} = \underline{\hspace{2cm}}$

16. $\frac{1}{\cos\theta} = \underline{\hspace{2cm}}$

17. $\frac{1}{\sec\theta} = \underline{\hspace{2cm}}$

18. $\frac{1}{\csc\theta} = \underline{\hspace{2cm}}$

19. $\frac{1}{\sin\theta} = \underline{\hspace{2cm}}$

20. $\frac{1}{\tan\theta} = \underline{\hspace{2cm}}$

V. Pythagorean Identities

21. $\sin^2\theta + \underline{\hspace{2cm}} = 1$

22. $1 + \underline{\hspace{2cm}} = \csc^2\theta$

23. $\underline{\hspace{2cm}} + 1 = \sec^2\theta$