

BERBAGAI IDENTITAS TRIGONOMETRI

1. $\sin^2 A + \cos^2 A = 1 \Leftrightarrow \cos^2 A = 1 - \sin^2 A \Leftrightarrow \sin^2 A = 1 - \cos^2 A$
2. $\tan^2 A + 1 = \sec^2 A \Leftrightarrow \tan^2 A = \sec^2 A - 1$
3. $1 + \cot^2 A = \csc^2 A \Leftrightarrow \cot^2 A = \csc^2 A - 1$
4. $\sin(A+B) = \sin A \cos B + \cos A \sin B$
5. $\sin(A-B) = \sin A \cos B - \cos A \sin B$
6. $\cos(A+B) = \cos A \cos B - \sin A \sin B$
7. $\cos(A-B) = \cos A \cos B + \sin A \sin B$
8. $\tan(A+B) = \frac{\tan A + \tan B}{1 - \tan A \cdot \tan B}$
9. $\tan(A-B) = \frac{\tan A - \tan B}{1 + \tan A \cdot \tan B}$
10. $\sin 2A = 2 \sin A \cos A$
11. $\cos 2A = \cos^2 A - \sin^2 A = 2 \cos^2 A - 1 = 1 - 2 \sin^2 A$
12. $\tan 2A = \frac{2 \tan A}{1 - \tan^2 A}$
13. $\cos^2 A = \frac{1 + \cos 2A}{2}$
14. $\sin^2 A = \frac{1 - \cos 2A}{2}$
15. $\sin(A+B) + \sin(A-B) = 2 \sin A \cos B \Leftrightarrow \sin A \cos B = \frac{\sin(A+B) + \sin(A-B)}{2}$
16. $\sin(A+B) - \sin(A-B) = 2 \cos A \sin B \Leftrightarrow \cos A \sin B = \frac{\sin(A+B) - \sin(A-B)}{2}$
17. $\sin A + \sin B = 2 \sin \frac{A+B}{2} \cos \frac{A-B}{2}$
18. $\sin A - \sin B = 2 \cos \frac{A+B}{2} \sin \frac{A-B}{2}$
19. $\cos(A+B) + \cos(A-B) = 2 \cos A \cos B \Leftrightarrow \cos A \cos B = \frac{\cos(A+B) + \cos(A-B)}{2}$
20. $\cos(A+B) - \cos(A-B) = -2 \sin A \sin B \Leftrightarrow \sin A \sin B = -\frac{\cos(A+B) - \cos(A-B)}{2}$