

$$1. \sin A \cot A = \cos A$$

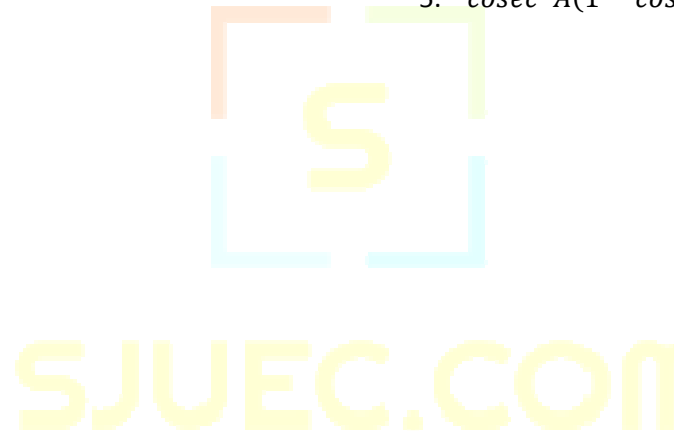
$$4. (1 + \tan A + \tan^2 A)(1 - \cot A + \cot^2 A) = \tan^2 A + \cot^2 A + 1$$

$$2. (1 - \cos^2 A)(1 + \tan^2 A) = \tan^2 A$$

$$5. \operatorname{cosec}^4 A(1 - \cos^4 A) - 2\cot^2 A = 1$$

$$3. \frac{1 + \cos A}{1 - \cos A} - \frac{1 - \cos A}{1 + \cos A} = 4\cot A \operatorname{cosec} A$$

$$6. \frac{\operatorname{cosec} A + \cot A}{\sec A + \tan A} = \frac{\sec A - \tan A}{\operatorname{cosec} A - \cot A}$$



7.  $\cos A \tan A = \sin A$

10.  $\sin^2 A + (1 + \cos A)^2 = 2(1 + \cos A)$

8.  $\tan A \cos A \operatorname{cosec} A = 1$

11.  $\tan A + \cot A = \sec A \operatorname{cosec} A$

9.  $\sin^4 A + \cos^4 A = 1 - 2\sin^2 A \cos^2 A$

12.  $5 - 3\cos^2 A = 2 + 3\sin^2 A$



$$13. \frac{\sin^3 A}{\cos^3 A} + \sin A = \tan A \sec A$$

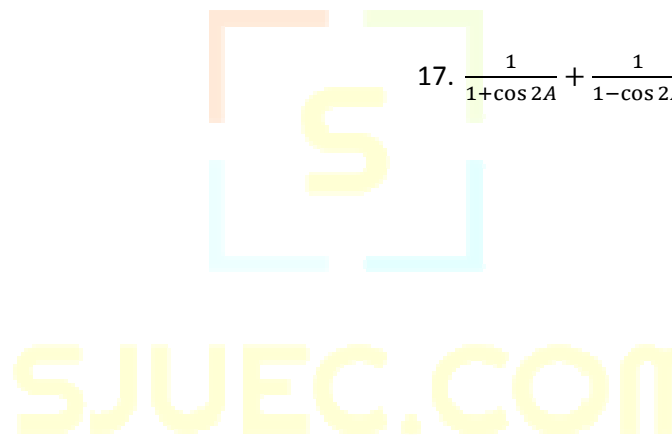
$$16. (\cos 2A + \sin 2A)^2 + (\cos 2A - \sin 2A)^2 = 2$$

$$14. \tan A = \frac{\sin A + 2 \sin A \cos A}{1 + \cos A + \cos^2 A - \sin^2 A}$$

$$17. \frac{1}{1 + \cos 2A} + \frac{1}{1 - \cos 2A} = 2 \operatorname{cosec}^2 2A$$

$$15. 1 - 3 \sin^2 2A = 3 \cos^2 2A - 2$$

$$18. \frac{2 \tan \frac{A}{2}}{1 + \tan^2 \frac{A}{2}} = \sin A$$



$$19. \sin 3A = 3 \sin A - 4 \sin^3 A$$

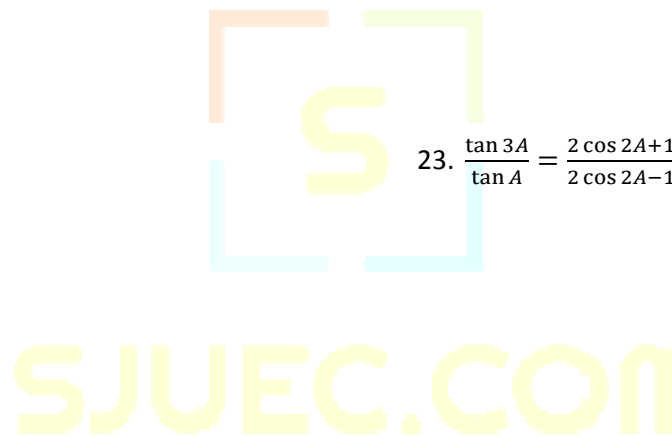
$$22. \frac{\sin A + \sin 2A}{1 + \cos A + \cos 2A} = \tan A$$

$$20. \tan 3A = \frac{3 \tan A - \tan^3 A}{1 - 3 \tan^2 A}$$

$$23. \frac{\tan 3A}{\tan A} = \frac{2 \cos 2A + 1}{2 \cos 2A - 1}$$

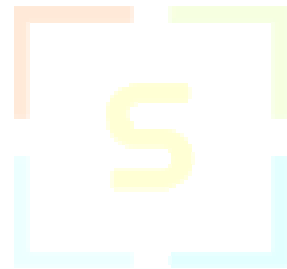
$$21. \frac{2 \tan A - \sin 2A}{2 \cot A - \sin 2A} = \tan^4 A$$

$$24. 1 + \tan A \tan \frac{A}{2} = \sec A$$



$$25. \frac{\sin 2A}{1-\cos 2A} = \cot A$$

$$26. \frac{\sec A-1}{\sec A+1} = \tan^2 \frac{A}{2}$$



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$$27. \frac{\tan 2A-\tan A}{\cot A+\tan 2A} = \tan^2 A$$