



I'm not robot



**I am not robot!**

Right-Triangle Definition: Reciprocal Identities: Ratio Identities: Tangent and Cotangent Identities: Pythagorean Identities: Reciprocal Identities: Half  
 Double Angle Formulas  $\sin(2u) = 2\sin u \cos u$   $\cos(2u) = \cos^2 u - \sin^2 u$   $\tan(2u) = \frac{2\tan u}{1 - \tan^2 u}$   $\cot(2u) = \frac{1 - \tan^2 u}{2\tan u}$   
 of Trigonometric Identities Prepared by Pythagorean Identities  $\sin^2 x + \cos^2 x = 1$   $\tan^2 x + 1 = \sec^2 x$   $\cot^2 x + 1 = \csc^2 x$ . Textbook of Algebra and Trigonometry for Class XI. Available online @, Version Example: Find all the complex fourth  
 roots of  $z^4 = 1$ . That is, find all the complex solutions of  $z^4 = 1$ . We are asked to find all complex fourth roots of 1. These are all the solutions (including the  
 complex values) of the equation  $z^4 = 1$ . For any positive integer  $n$ , a nonzero complex number  $z$  has exactly  $n$  distinct  $n$ th roots. Title: Trig\_Cheat\_Sheet  
 Author: ptdaw Created Date: 2/2/AM Double Angle and Half Angle Formulas  $\sin(2u) = 2\sin u \cos u$   $\cos(2u) = \cos^2 u - \sin^2 u$   $\tan(2u) = \frac{2\tan u}{1 - \tan^2 u}$   $\cot(2u) = \frac{1 - \tan^2 u}{2\tan u}$   
 Other Useful Trig Formulas Law of sines  $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$  Law of cosines  $a^2 = b^2 + c^2 - 2bc \cos A$   $b^2 = a^2 + c^2 - 2ac \cos B$   $c^2 = a^2 + b^2 - 2ab \cos C$   
 Angle Addition, Double Angle, Half Angle Formulas Examples Power Reducing Formulas Product-to-Sum Formulas Sum-to-Product Formulas Examples Chapter Trigonometric Identities and Equations Verifying Identities Verifying Identities Techniques Solving Trigonometric  
 Equations Solving Trigonometric Equations Examples Trig Cheat Sheet Definition of the Trig Functions Product to Sum Formulas  $\sin y \cos x = \frac{1}{2}[\sin(y+x) + \sin(y-x)]$   $\cos y \sin x = \frac{1}{2}[\sin(y+x) - \sin(y-x)]$   
 $\sin y \sin x = \frac{1}{2}[\cos(y-x) - \cos(y+x)]$   $\cos y \cos x = \frac{1}{2}[\cos(y-x) + \cos(y+x)]$   $\tan y \tan x = \frac{\sin(y+x) - \sin(y-x)}{\cos(y+x) + \cos(y-x)}$   $\cot y \cot x = \frac{\cos(y+x) + \cos(y-x)}{\sin(y+x) - \sin(y-x)}$  Facts © Paul Dawkins Trig Cheat Sheet Definition of the Trig Functions Right triangle definition For  
 this definition we assume that  $0 < \theta < \frac{\pi}{2}$