

S'2.1

$\cos x = \frac{1}{2}$  &  $\sin x = \frac{\sqrt{3}}{2}$  Find all trig

~~$\cos x = \frac{1}{2}$  &  $\sin x = -\frac{\sqrt{3}}{2}$~~  .. ..

~~$\csc x = 5$  &  $\cos x < 0$~~  .. ..

Sorta like S'2.1 Solve

$$\cot^2 x + \csc x - 1 = 0$$

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I like the cofunction IDs, too

5 2.2 Evaluate w/o a calculator.

$$\tan^2 63^\circ + \cot^2 16^\circ - \sec^2 74^\circ - \csc^2 27^\circ$$

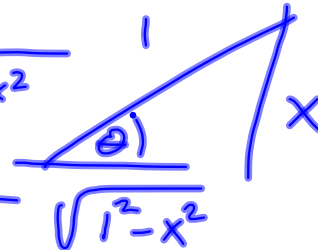
$$\tan^2 63^\circ + \csc^2 16^\circ - 1 - \csc^2(16^\circ) - \csc^2 27^\circ$$

$$\sec^2 63^\circ - 1 - 1 - \csc^2 27^\circ$$

$$\csc^2(27^\circ) - 2 - \csc^2 27^\circ = -2$$

Express as an algebraic expression

$$\cos(\sin^{-1}(x)) = \cos \theta = \sqrt{1-x^2}$$



S' 2.3

$$4\cos^2\theta - 1 = 0$$

$$2\sin^2(2x) = 1$$

(M1) Use Double-angle ID

(M2) Don't use M1 & logic it out.