

S	A
T	C

Name: Key

Problem Set 3.6

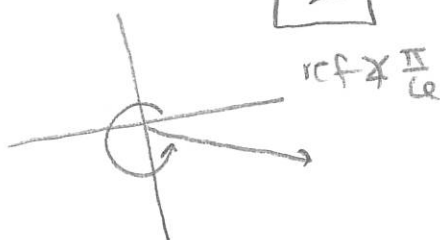
Follow all directions and show all of your work in order to receive full credit.

1 - 24] Find the exact value of the following trigonometric expressions.

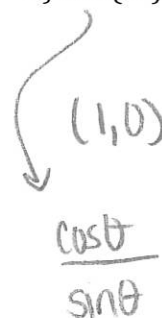
1) $\cos\left(\frac{5\pi}{6}\right) = \boxed{-\frac{\sqrt{3}}{2}}$



2) $\sin\left(\frac{11\pi}{6}\right) = \boxed{-\frac{1}{2}}$



3) $\cot(0^\circ) = \frac{1}{0} = \boxed{\text{undef}}$



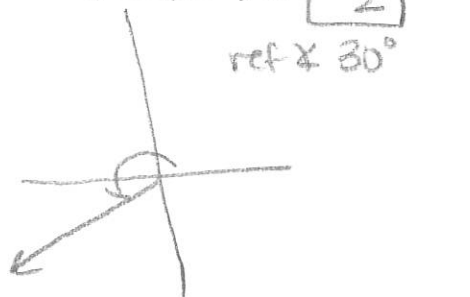
4) $\sec\left(\frac{3\pi}{2}\right) = \frac{1}{0} = \boxed{\text{undef}}$



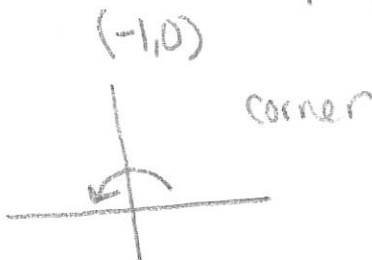
5) $\sec\left(\frac{2\pi}{3}\right) = \boxed{-2}$



6) $\sin(210^\circ) = \boxed{-\frac{1}{2}}$



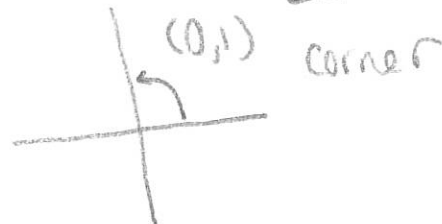
7) $\cot(\pi) = \frac{0}{-1} = \boxed{0}$



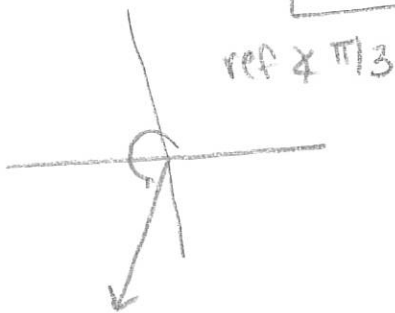
8) $\csc\left(-\frac{5\pi}{4}\right) = \boxed{\sqrt{2}}$



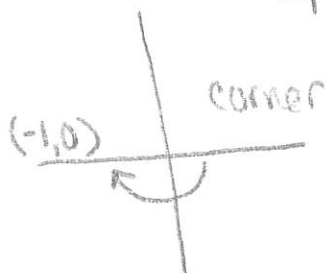
9) $\cos(90^\circ) = \boxed{0}$



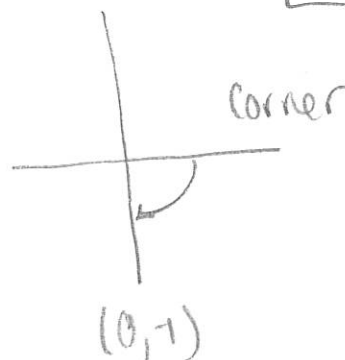
10) $\sin\left(\frac{4\pi}{3}\right) = \boxed{-\frac{\sqrt{3}}{2}}$



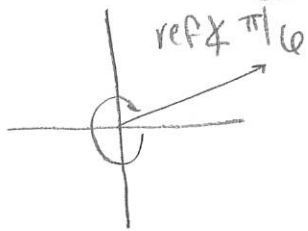
11) $\tan(-\pi) = \frac{0}{-1} = \boxed{0}$



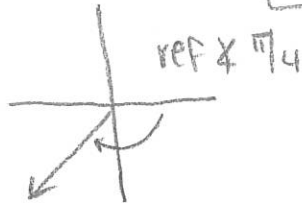
12) $\csc(-90^\circ) = \boxed{-1}$



$$13) \sec\left(\frac{-11\pi}{6}\right) = \frac{2\sqrt{3}}{3}$$



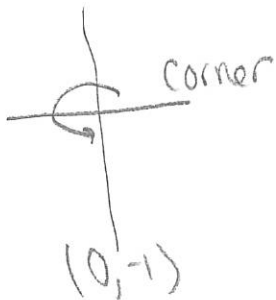
$$14) \sin\left(\frac{-3\pi}{4}\right) = -\frac{\sqrt{2}}{2}$$



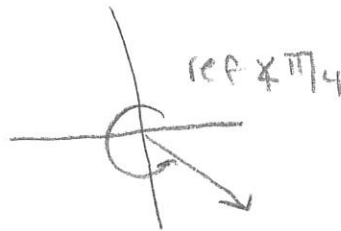
$$15) \sec(30^\circ) = \frac{2\sqrt{3}}{3}$$



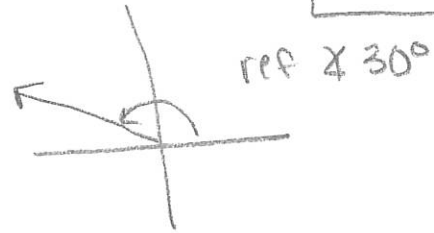
$$16) \tan\left(\frac{3\pi}{2}\right) = \frac{-1}{0} = \text{undef}$$



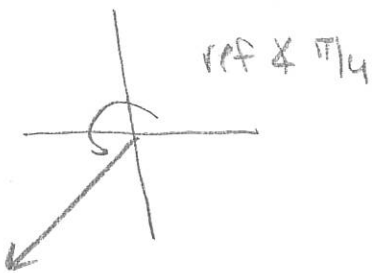
$$17) \tan\left(\frac{7\pi}{4}\right) = -1$$



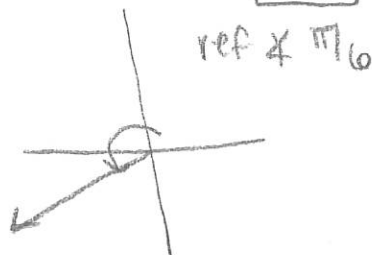
$$18) \tan(150^\circ) = -\frac{\sqrt{3}}{3}$$



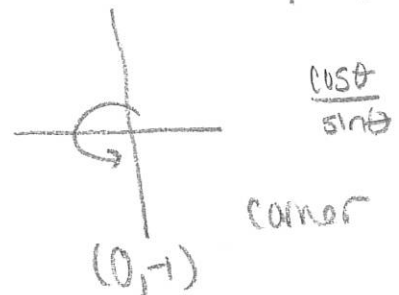
$$19) \cos\left(\frac{5\pi}{4}\right) = -\frac{\sqrt{2}}{2}$$



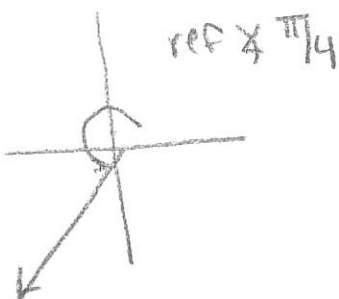
$$20) \sec\left(\frac{7\pi}{6}\right) = -\frac{2\sqrt{3}}{3}$$



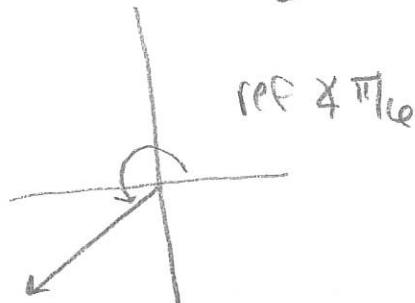
$$21) \cot\left(\frac{3\pi}{2}\right) = \frac{0}{-1} = 0$$



$$22) \csc\left(\frac{5\pi}{4}\right) = -\sqrt{2}$$



$$23) \cot\left(\frac{7\pi}{6}\right) = \sqrt{3}$$



$$24) \sin\left(\frac{3\pi}{2}\right) = -1$$

