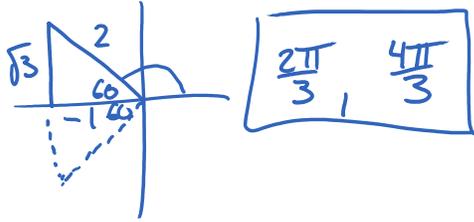
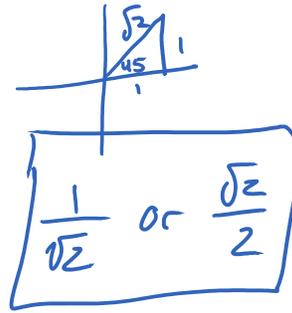


Warm-up

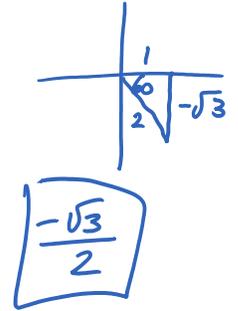
① $\cos x = -\frac{1}{2} \quad 0 \leq x \leq 2\pi$



② $\cos 45^\circ$



③ $\sin 30^\circ = \frac{5\pi}{3}$

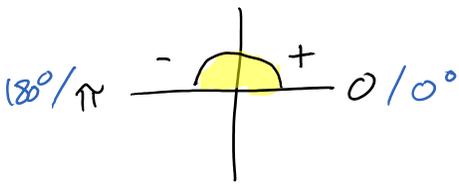


$\sqrt{x^2} = \sqrt{16}$
 $x = \pm 4$

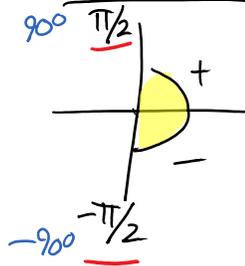
$\sqrt{16}$
 \downarrow
4

$\cos x = -\frac{1}{2} \quad 0 \leq x \leq 2\pi$
 $\cos^{-1}(-\frac{1}{2})$
 $\frac{2\pi}{3}, \frac{4\pi}{3}$
 $\frac{2\pi}{3}$

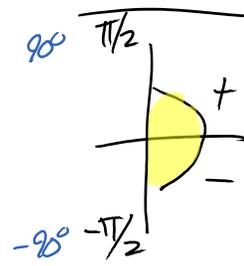
$\cos^{-1}(\sec^{-1})$



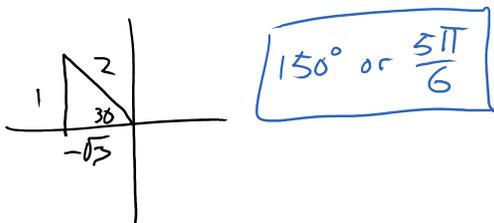
$\sin^{-1}(\csc^{-1})$



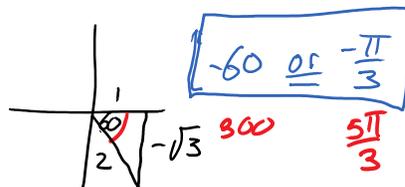
$\tan^{-1}(\cot^{-1})$



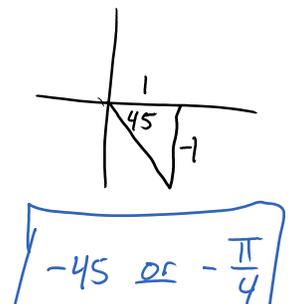
① $\cos^{-1}(-\frac{\sqrt{3}}{2})$



② $\arcsin(-\frac{\sqrt{3}}{2})$



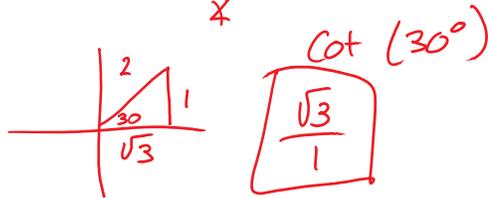
③ $\tan^{-1}(-1)$



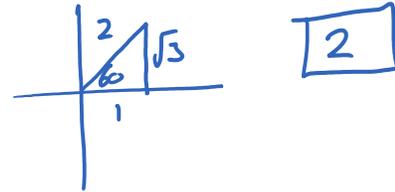
$$\boxed{-45 \text{ or } -\frac{\pi}{4}}$$

315 $\frac{7\pi}{4}$

④ $\cot \left[\sin^{-1} \left(\frac{1}{2} \right) \right]$



⑤ $\sec \left[\arccos \left(-\frac{1}{2} \right) \right]$



⑥ $\csc \left[\tan^{-1} (1) \right]$

