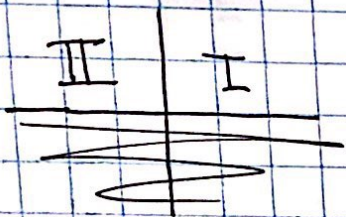


Evaluate

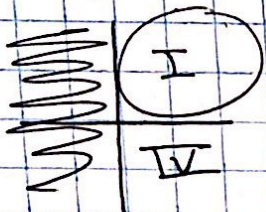
$$1) \cos^{-1}\left(\frac{\sqrt{3}}{2}\right) = \frac{\pi}{6}$$

- 1) Where is inverse cosine defined I + II
- 2) Check the sign + pick a quadrant I
- 3) Where is the cosine $\frac{\sqrt{3}}{2}$ $\frac{\pi}{6}$



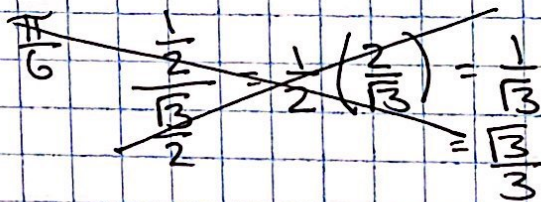
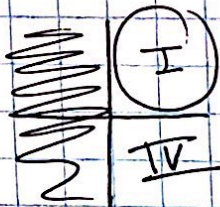
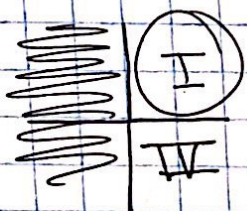
$$2) \sin^{-1}\left(\frac{1}{2}\right) = \frac{\pi}{6}$$

- 1) Defined? I + IV
- 2) \checkmark sign + pick quad I
- 3) Where is sine $\frac{1}{2}$ $\frac{\pi}{6}$

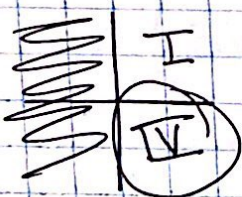


$$3) \tan^{-1}(+1) = \frac{\pi}{4}$$

$$7) \tan^{-1}(+\sqrt{3}) = \frac{\pi}{3}$$

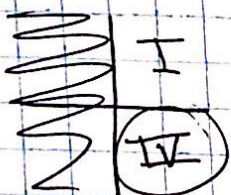


$$5) \sin^{-1}\left(-\frac{\sqrt{3}}{2}\right) = -\frac{\pi}{3}$$



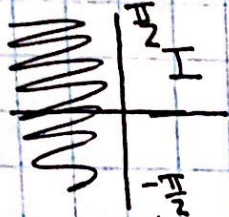
$$6) \sin^{-1}\left(-\frac{\sqrt{3}}{2}\right) = -\frac{\pi}{3}$$

$$6) \sin^{-1}\left(-\frac{\sqrt{2}}{2}\right) = -\frac{\pi}{4}$$

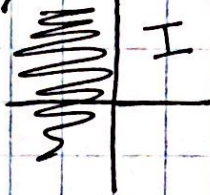


Evaluate to 2 decimal places

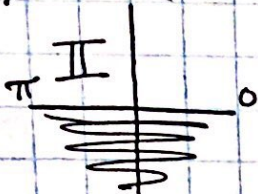
1) $\sin^{-1} 0.621 = .67$



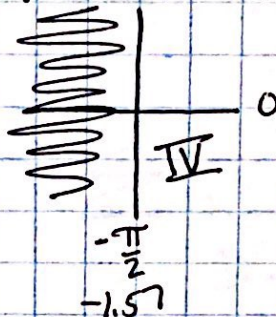
2) $\tan^{-1} 1.21 = .88$



3) $\cos^{-1} (-0.170) = 1.74$



4) $\sin^{-1} (-0.932) = -1.20$



5) $\cot^{-1} (-1.56) = 2.57$

$\cot^{-1} (-1.56) = x$

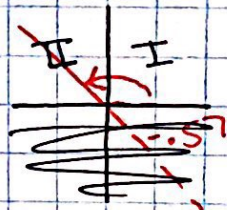
$\cot x = -1.56$

$\frac{1}{\tan x} = -1.56$

$\tan x = \frac{-1}{1.56}$

$x = \tan^{-1} \left(\frac{-1}{1.56} \right)$

$x = -.57$



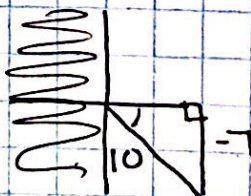
$\alpha = .57$

$\pi - .57 = 2.57$

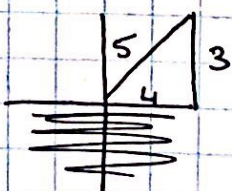
Evaluate.

1) $\sin(\sin^{-1}(-.7))$

$\sin\left(\sin^{-1}\left(\frac{-7}{10}\right)\right) = \frac{-7}{10}$



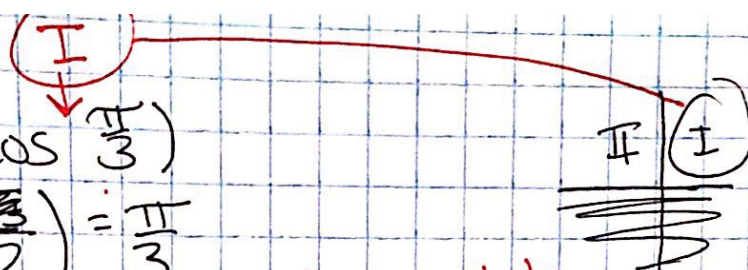
2) $\sin(\cos^{-1}(\frac{4}{5})) = \frac{3}{5}$



$4^2 + 3^2 = 5^2$

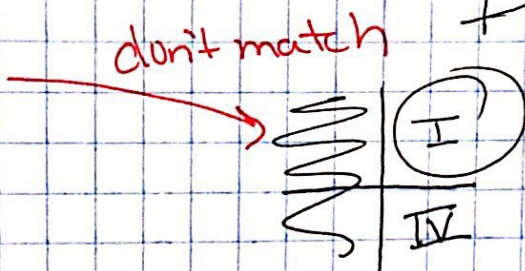
$$3) \cos^{-1}(\cos \frac{\pi}{3}) = \frac{\pi}{3}$$

$$\cos^{-1}(\frac{1}{2}) = \frac{\pi}{3}$$



$$4) \sin^{-1}(\sin \frac{3\pi}{4}) = \frac{3\pi}{4}$$

$$\sin^{-1}(\frac{\sqrt{2}}{2}) = \frac{\pi}{4}$$



$$5) \tan^{-1}(\tan \frac{5\pi}{4}) = \frac{5\pi}{4}$$

$$\tan^{-1}(+1) = \frac{\pi}{4}$$

