

$$5. \cos^{-1}(0.3) = 1.07$$

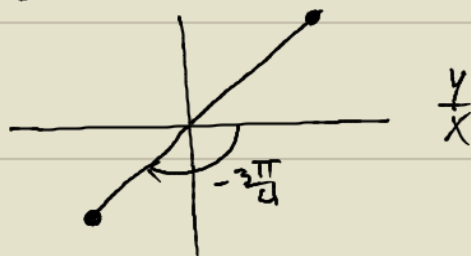
$$6. \tan^{-1}(-5) = -1.37$$

$$7. \cos^{-1}(\cos(-\frac{\pi}{8})) = \cos^{-1}(\cos(\frac{\pi}{8})) = \frac{\pi}{8}$$

$$8. \tan^{-1}(\tan(-\frac{3\pi}{4})) = \tan^{-1}(\tan(-\frac{3\pi}{4} + \pi)) = \tan^{-1}(\tan(\frac{\pi}{4})) = \frac{\pi}{4}$$

$-\frac{\pi}{2}$ to $\frac{\pi}{2}$

$$\frac{\pi}{8}$$



$$9. \cos(\cos^{-1}(-\frac{1}{7})) = -\frac{1}{7}$$

$$10. \sin(\sin^{-1}(5)) \text{ NOT DEFINED}$$

$$11. f(x) = 5 \tan x + 1$$

$$① y = 5 \tan x + 1$$

$$② x = 5 \tan y + 1$$

$$③ x - 1 = 5 \tan y$$

$$\frac{x-1}{5} = \frac{5 \tan y}{5}$$

$$\frac{x-1}{5} = \tan y$$

$$\tan^{-1}\left(\frac{x-1}{5}\right) = \tan^{-1}(\tan y)$$

$$\tan^{-1}\left(\frac{x-1}{5}\right) = y$$

$$④ f^{-1}(x) = \tan^{-1}\left(\frac{x-1}{5}\right)$$

$$12. 4 \cos^{-1} x = \pi$$

$$\frac{4 \cos^{-1} x}{4} = \frac{\pi}{4}$$

$$\cos^{-1} x = \frac{\pi}{4}$$

$$\cos(\cos^{-1} x) = \cos \frac{\pi}{4}$$

$$x = \frac{\sqrt{2}}{2}$$

$$13. 5 \cos^{-1} x + 8\pi = 7\pi + \cos^{-1} x$$

$$5 \cos^{-1} x - \cos^{-1} x = 7\pi - 8\pi$$

$$4 \cos^{-1} x = -\pi$$

$$\frac{4 \cos^{-1} x}{4} = \frac{-\pi}{4}$$

$$\cos^{-1} x = -\frac{\pi}{4}$$

$$\cos(\cos^{-1} x) = \cos\left(-\frac{\pi}{4}\right)$$

$$x = \cos\left(\frac{\pi}{4}\right)$$

$$x = \frac{\sqrt{2}}{2}$$