

p.251

9) $\sin \frac{\pi}{2} =$ _____

10) $\tan 2\pi =$ _____

11) $\cot(-180^\circ) =$ _____

12) $\csc 270^\circ =$ _____

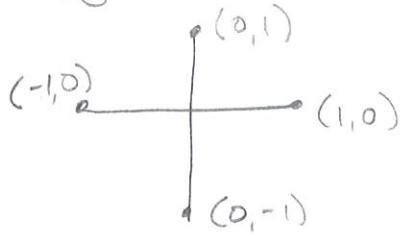
13) $\cos(-270^\circ) =$ _____

14) $\sec 180^\circ =$ _____

15) $\tan \pi =$ _____

16) $\sec\left(-\frac{\pi}{2}\right) =$ _____

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$(x, y) \Rightarrow (\text{adjacent}, \text{opposite})$
 $\Rightarrow (\text{cosine}, \text{sine})$

$$\tan \theta = \frac{y}{x} \quad \cot \theta = \frac{x}{y}$$

9. $\sin \frac{\pi}{2} = 1$

10. $\tan 2\pi = \frac{0}{1} = 0$

11. $\cot(-180^\circ) = \frac{-1}{0} = \text{undefined}$

12. $\csc 270^\circ = -1$

$\hookrightarrow \sin 270^\circ = \frac{-1}{1}$

13. $\cos(-270^\circ) = 0$

14. $\sec 180^\circ = -1$

$\hookrightarrow \cos 180^\circ = \frac{-1}{1}$

15. $\tan \pi = \frac{0}{-1} = 0$

16. $\sec\left(-\frac{\pi}{2}\right) = \frac{1}{0} = \text{undefined}$

$\hookrightarrow \cos\left(-\frac{\pi}{2}\right) = \frac{0}{1}$