5. Use a calculator to approximate the value of the expression in radians. Round your answers to the nearest thousandth.

A. $\arccos(-0.75)$ 2.419

B. $\sec^{-1}(7.5)$ $\cos^{-1}\left(\frac{1}{7.5}\right) = 1.437$

C. $\cot^{-1}(-1.5)$ $\tan^{-1}\left(\frac{1}{-1.5}\right) + \pi = 2.554$

D. $\arctan(-5)$ $= -1.373$

6. For the equations $y = \sin^{-1}(x)$, circle all the answers that are true:

A. The domain is in radians and the range is a ratio.

(B.) The domain is a ratio and the range is in radians.

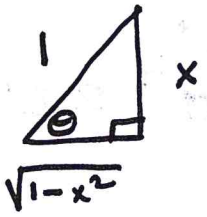
C. The domain is all real numbers and the range is $[-1, 1]$.

D. The domain is $[-1, 1]$ and the range is $(-\infty, \infty)$.

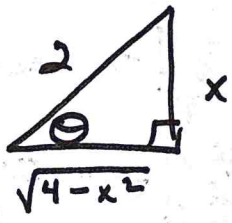
(E.) The domain is $[-1, 1]$ and the range is $\left[-\frac{\pi}{2}, \frac{\pi}{2}\right]$.

7. Write an algebraic expression that is equivalent to the expression. Hint: Sketch a right triangle.

A. $\tan(\arcsin x)$ $= \tan\theta = \frac{x}{\sqrt{1-x^2}}$



B. $\sec\left[\arcsin\left(\frac{x}{2}\right)\right]$ $= \sec\theta = \frac{2}{\sqrt{4-x^2}}$



8. Sketch the graph of $y = \arcsin x$, $y = \arccos x$, and $y = \arctan x$