

Section 1.5: Additional Problems

1. Find the exact value of the expression.

(a) $\tan^{-1}(-\sqrt{3}) =$

(b) $\cos(\tan^{-1}(5)) =$

(c) $\arcsin\left(\sin\left(\frac{11\pi}{4}\right)\right)$

(d) $\arctan\left(\tan\left(\frac{7\pi}{4}\right)\right)$

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

(f) $\sin^{-1}\left(\frac{-1}{2}\right)$

(g) $\cos\left(\sin^{-1}\left(\frac{-1}{2}\right)\right)$

(h) $\cos\left(\sin^{-1}\left(\frac{-1}{5}\right)\right)$

2. Simplify the expression

(a) $\tan(\arcsin x) =$

(b) $\sin(2 \arccos x) =$

(c) $\cos(\arcsin(5x)) =$

(d) $\tan\left(\arccos\left(\frac{3x}{2}\right)\right) =$