

Homework for 4.7X

1. Evaluate the following:

(a) $\arccos(-1)$

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

(c) $\arccos\left(\cos\left(-\frac{\pi}{3}\right)\right)$

(d) $\sin^{-1}(1)$

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

(f) $\arcsin\left(\sin\left(\frac{5\pi}{4}\right)\right)$

(g) $\sin^{-1}\left(\sin\left(\frac{\pi}{120}\right)\right)$

(h) $\tan^{-1}(1)$

(i) $\arctan(-1)$

2. Find the following derivatives

(a) $f(x) = \arcsin(6 - 3x)$

(b) $y = \tan^{-1}(\arccos x)$