Inverse Trig Functions
Evaluate each expression.

[1] $\sin^{-1}\dfrac{1}{2}$

[2] $\sin^{-1}\left(-\dfrac{1}{2}\right)$

[3] $\sin^{-1}1$

[4] $\sin^{-1}\dfrac{\sqrt{3}}{2}$

[5] $\sin^{-1}\left(-\dfrac{\sqrt{3}}{2}\right)$

[6] $\sin^{-1}(-1)$

[7] $\sin^{-1}\dfrac{1}{\sqrt{2}}$

[8] $\sin^{-1}\left(-\dfrac{1}{\sqrt{2}}\right)$

[9] $\sin^{-1}(0)$

[10] $\cos^{-1}\dfrac{1}{2}$

[11] $\cos^{-1}\left(-\dfrac{1}{2}\right)$

[12] $\cos^{-1}1$

[13] $\cos^{-1}\dfrac{\sqrt{3}}{2}$

[14] $\cos^{-1}\left(-\dfrac{\sqrt{3}}{2}\right)$

[15] $\cos^{-1}(-1)$

[16] $\cos^{-1}\dfrac{1}{\sqrt{2}}$

[17] $\cos^{-1}\left(-\dfrac{1}{\sqrt{2}}\right)$

[18] $\cos^{-1}(0)$

[19] $\tan^{-1}1$

[20] $\tan^{-1}(-1)$

[21] $\tan^{-1}\sqrt{3}$

[22] $\tan^{-1}\left(-\sqrt{3}\right)$

[23] $\tan^{-1}\dfrac{1}{\sqrt{3}}$

[24] $\tan^{-1}\left(-\dfrac{1}{\sqrt{3}}\right)$

[25] $\tan^{-1}0$

[26] $\sec\left(\sin^{-1}\dfrac{1}{2}\right)$

[27] $\csc\left(\cos^{-1}\dfrac{1}{2}\right)$

[28] $\tan^{-1}\left(\tan\dfrac{5\pi}{4}\right)$

[29] $\sin^{-1}\left(\sin\dfrac{11\pi}{6}\right)$

[30] $\cos^{-1}\left(\cos\dfrac{4\pi}{3}\right)$
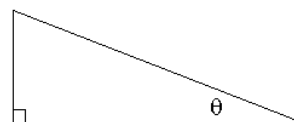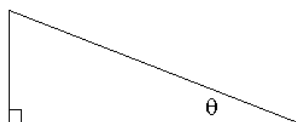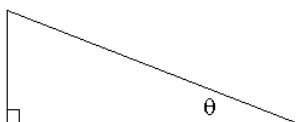
[31] $\tan^{-1}\left(\tan\dfrac{2\pi}{3}\right)$

[32] $\sin^{-1}\left(\sin\dfrac{3\pi}{4}\right)$

[33] $\cos^{-1}\left(\cos\dfrac{5\pi}{6}\right)$

[34] $\cos\left(\sin^{-1}\dfrac{15}{17}\right)$
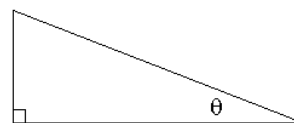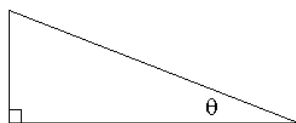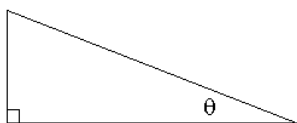
[35] $\sec\left(\sin^{-1}\dfrac{9}{41}\right)$

[36] $\csc\left(\cos^{-1}\dfrac{7}{25}\right)$

[37] $\tan\left(\cos^{-1}\dfrac{9}{41}\right)$

[38] $\sin\left(\tan^{-1}\dfrac{8}{15}\right)$

[39] $\sec\left(\tan^{-1}\dfrac{12}{5}\right)$

[40] $\cos\left(\sin^{-1}\dfrac{24}{25}\right)$

[41] $\cot\left(\cos^{-1}\dfrac{40}{41}\right)$

[42] $\sin\left(\tan^{-1}\dfrac{7}{24}\right)$