

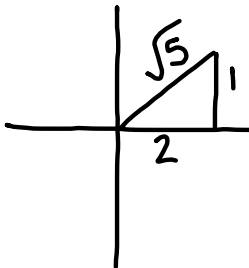
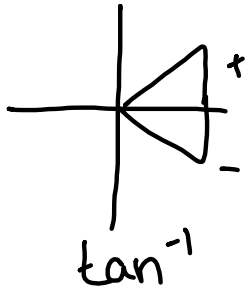
Section 7.2

The Inverse Trigonometric Functions (Continued)

1 Find the Exact Value of Expressions Involving the Inverse Sine, Cosine, and Tangent Functions

EXAMPLE Finding the Exact Value of an Expression Involving Inverse Trigonometric Functions

Find the exact value of: $\sin\left(\tan^{-1}\frac{1}{2}\right) = \frac{1}{\sqrt{5}} = \frac{\sqrt{5}}{5}$



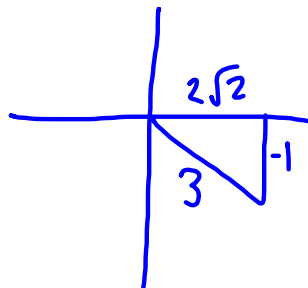
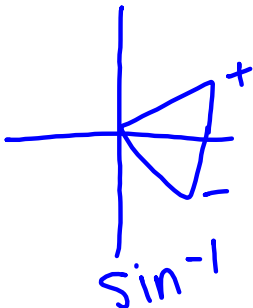
$\tan ? = \frac{1}{2}$

$1^2 + 2^2 = c^2$

$5 = c^2$

$\sqrt{5} = c$

Find the exact value of: $\cos\left[\sin^{-1}\left(-\frac{1}{3}\right)\right] = \frac{2\sqrt{2}}{3}$



$3^2 = (-1)^2 + b^2$

$9 = 1 + b^2$

$8 = b^2$

$2\sqrt{2} = b$

Find the exact value of: $\tan\left[\cos^{-1}\left(-\frac{1}{3}\right)\right] = -2\sqrt{2}$

