The Inverse Sine, Cosine, and Tangent Functions

1. Find the exact value of each expression
(Similar to p.192 #16)

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

2. Find the exact value of each expression
(Similar to p.192 #18)

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

3. Find the exact value of each expression
(Similar to p.192 #20)

$$\tan^{-1}\left(\frac{-\sqrt{3}}{3}\right)$$

4. Find the exact value of each expression
(Similar to p.192 #24)

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

5. Use a calculator to find the value of each expression rounded to two decimal places.
(Similar to p.192 #26)

$$\cos^{-1}(0.3)$$

6. Use a calculator to find the value of each expression rounded to two decimal places.
(Similar to p.192 #32)

$$\tan^{-1}(-5)$$

7. Find the exact value of each expression. Do not use a calculator
(Similar to p.192 #38)

$$\cos^{-1}\left(\cos\left(\frac{-\pi}{8}\right)\right)$$

8. Find the exact value of each expression. Do not use a calculator.
(Similar to p.192 #44)

$$\tan^{-1}\left(\tan\left(\frac{-3\pi}{4}\right)\right)$$

9. Find the exact value, if any, of each composite function. If there is no value, say it is "not defined". Do not use a calculator.
(Similar to p.192 #46)

$$\cos\left(\cos^{-1}\left(\frac{-1}{7}\right)\right)$$

10. Find the exact value, if any, of each composite function. If there is no value, say it is "not defined". Do not use a calculator.
(Similar to p.192 #50)

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

11. Find the inverse function f^{-1} of each function f.
(Similar to p.192 #54)

$$f(x) = 5\tan x + 1$$

12. Find the exact solution of each equation.
(Similar to p.192 #62)

$$4\cos^{-1} x = \pi$$

13. Find the exact solution of each equation.
(Similar to p.192 #68)

$$5\cos^{-1} x + 8\pi = 7\pi + \cos^{-1} x$$