

Section 10.1: Inverse Trigonometric Functions

1. Inverse Sine Function

2. Inverse Cosine Function

16. $\sin^{-1}(\frac{1}{2})$

17. $\cos^{-1}(\frac{1}{2})$

18. $\tan^{-1}(\frac{1}{2})$

19. $\cot^{-1}(\frac{1}{2})$

20. $\sin^{-1}(\frac{\sqrt{3}}{2})$

21. $\cos^{-1}(\frac{\sqrt{3}}{2})$

22. $\tan^{-1}(\frac{\sqrt{3}}{2})$

23. $\cot^{-1}(\frac{\sqrt{3}}{2})$

24. $\sin^{-1}(\frac{1}{\sqrt{2}})$

25. $\cos^{-1}(\frac{1}{\sqrt{2}})$

26. $\tan^{-1}(\frac{1}{\sqrt{2}})$

27. $\cot^{-1}(\frac{1}{\sqrt{2}})$

28. $\sin^{-1}(\frac{\sqrt{2}}{2})$

29. $\cos^{-1}(\frac{\sqrt{2}}{2})$

30. $\tan^{-1}(\frac{\sqrt{2}}{2})$

31. $\frac{d}{dx} \sin^{-1}(x)$

32. $\frac{d}{dx} \cos^{-1}(x)$

33. $\frac{d}{dx} \tan^{-1}(x)$

34. $\sin^{-1}(\frac{1}{2}) = \frac{\pi}{6}$

35. $\cos^{-1}(\frac{1}{2}) = \frac{\pi}{3}$

36. $\tan^{-1}(\frac{1}{2}) = \frac{\pi}{6}$

37. $\cot^{-1}(\frac{1}{2}) = \frac{\pi}{3}$

38. $\sin^{-1}(\frac{\sqrt{3}}{2}) = \frac{\pi}{3}$

39. $\cos^{-1}(\frac{\sqrt{3}}{2}) = \frac{\pi}{6}$

40. $\frac{d}{dx} \sin^{-1}(x)$

41. $\frac{d}{dx} \cos^{-1}(x)$

42. $\frac{d}{dx} \tan^{-1}(x)$

43. $\frac{d}{dx} \cot^{-1}(x)$

44. $\sin^{-1}(\frac{1}{2})$

45. $\cos^{-1}(\frac{1}{2})$

46. $\tan^{-1}(\frac{1}{2})$

47. $\cot^{-1}(\frac{1}{2})$

48. $\frac{d}{dx} \sin^{-1}(x)$

49. $\frac{d}{dx} \cos^{-1}(x)$

50. $\frac{d}{dx} \tan^{-1}(x)$

51. $\frac{d}{dx} \cot^{-1}(x)$

52. $\frac{d}{dx} \sin^{-1}(x)$

53. $\frac{d}{dx} \cos^{-1}(x)$

54. $\frac{d}{dx} \tan^{-1}(x)$

55. $\frac{d}{dx} \cot^{-1}(x)$

56. $\sin^{-1}(\frac{1}{2})$

57. $\cos^{-1}(\frac{1}{2})$

58. $\tan^{-1}(\frac{1}{2})$

59. $\cot^{-1}(\frac{1}{2})$

60. $\frac{d}{dx} \sin^{-1}(x)$

61. $\frac{d}{dx} \cos^{-1}(x)$

62. $\frac{d}{dx} \tan^{-1}(x)$

63. $\frac{d}{dx} \cot^{-1}(x)$