

List of Derivatives, Integrals and Trig Identities

Derivatives

1. $\frac{d}{dx}(x^n) =$

2. $\frac{d}{dx}(f(x) + g(x)) =$

3. $\frac{d}{dx} f(x) \cdot g(x) =$

4. $\frac{d}{dx} \left(\frac{f(x)}{g(x)} \right) =$

5. $\frac{d}{dx} f(g(x)) =$

6. $\frac{d}{dx}(e^x) =$

7. $\frac{d}{dx}(\ln |x|) =$

8. $\frac{d}{dx}(\sin x) =$

9. $\frac{d}{dx}(\cos x) =$

10. $\frac{d}{dx}(\tan x) =$

11. $\frac{d}{dx}(\cot x) =$

12. $\frac{d}{dx}(\sec x) =$

13. $\frac{d}{dx}(\csc x) =$

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

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

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

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

18. $\frac{d}{dx}(\sec^{-1} x) =$

19. $\frac{d}{dx}(\csc^{-1} x) =$

20. $\frac{d}{dx}(\sinh x) =$

21. $\frac{d}{dx}(\cosh x) =$

Integrals

22. $\int x^n dx =$ $n \neq -1$

23. $\int \frac{1}{x} dx =$

24. $\int e^x dx =$

25. $\int \sin x dx =$

26. $\int \cos x dx =$

27. $\int \sec^2 x dx =$

28. $\int \sec x \tan x dx =$

29. $\int \csc^2 x dx =$

30. $\int \csc x \cot x dx =$

31. $\int \frac{1}{\sqrt{a^2 - x^2}} dx =$

32. $\int \frac{1}{a^2 + x^2} dx =$

33. $\int \frac{1}{x\sqrt{x^2 - a^2}} dx =$

	0	$\pi/6$	$\pi/4$	$\pi/3$	$\pi/2$	Positive or Negative by quadrant			
						1 st	2 nd	3 rd	4 th
$\sin x$									
$\cos x$									
$\tan x$									
$\cot x$									
$\sec x$									
$\csc x$									

Trig Identities

34. $\sin^2 x + \cos^2 x =$

35. $1 + \tan^2 x =$

36. $\sin(x + y) =$

37. $\cos(x + y) =$

38. $\sin 2x =$

39. $\cos 2x =$

Right Angle Trigonometry

40. $\sin \theta =$

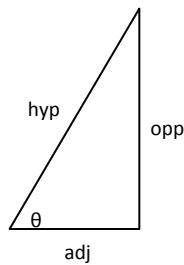
41. $\cos \theta =$

42. $\tan \theta =$

43. $\cot \theta =$

44. $\sec \theta =$

45. $\csc \theta =$



Half-Angle Formulas

46. $\sin^2 x =$

47. $\cos^2 x =$