10.) $\int \csc x \cdot \cot x \, dx = -\csc x + C$

11.) $\int \tan x \, dx = \ln|\sec x| + C$ (Proof is on prior Page)

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Table of Indefinite Integrals

1) $\int (f(x) + g(x)) \, dx = \int f(x) dx + \int F(x) \, dx + \int g(x) dx$

2) $\int k \cdot F(x) dx = k \int f(x) dx$ ($k \neq 0$ is a constant)

3) $\int x^n dx = \frac{x^{n+1}}{n+1} + C$, $n \neq -1$, is any real number

4) $\int 1/x \, dx = \int \frac{dx}{x} = \ln|x| + C$

5) $\int \sin x \, dx = -\cos x + C$

6) $\int \cos x \, dx = \sin x + C$

7) $\int \sec^2 x \, dx = \tan x + C$

8) $\int \csc^2 x \, dx = -\cot x + C$

9) $\int \tan x \, dx = \ln|\sec x| + C$

10) $\int \cot x \, dx = -\ln|\csc x| + C$

11) $\int \sec x \cdot \tan x \, dx = \sec x + C$

12.) $\int \csc x \cdot \cot x \, dx = -\csc x + C$

13.) $\int 1/1+x^2 \, dx = \int \frac{dx}{1+x^2} = \tan^{-1} x + C$ ($\tan^{-1} = \arctan x$)