

Indefinite Integrals

$$(1) \quad \int x^n dx = \frac{1}{n+1}x^{n+1}, \quad n \neq -1$$

$$(6) \quad \int \cos x dx = \sin x$$

$$(2) \quad \int \frac{1}{x} dx = \ln |x|$$

$$(7) \quad \int \sec^2 x dx = \tan x$$

$$(3) \quad \int e^x dx = e^x$$

$$(4) \quad \int b^x dx = \frac{1}{\ln b}b^x$$

$$(8) \quad \int \frac{1}{1+x^2} dx = \tan^{-1} x$$

$$(5) \quad \int \sin x dx = -\cos x$$

$$(9) \quad \int \frac{1}{\sqrt{1-x^2}} dx = \sin^{-1} x$$