TAULA D'INTEGRALS IMMEDIATES

$$\int x^n dx = \frac{x^{n+1}}{n+1} + k \quad \text{si } n \neq -1$$

$$\int [f(x)]^n \cdot f'(x)\, dx = \frac{[f(x)]^{n+1}}{n+1} + k \quad \text{si } n \neq -1$$

$$\int \frac{1}{x} dx = \ln|x| + k$$

$$\int \frac{f'(x)}{f(x)} dx = \ln|f(x)| + k$$

$$\int e^x\, dx = e^x + k$$

$$\int e^{f(x)} \cdot f'(x)\, dx = e^{f(x)} + k$$

$$\int a^x\, dx = \frac{a^x}{\ln a} + k$$

$$\int a^{f(x)} \cdot f'(x)\, dx = \frac{a^{f(x)}}{\ln a} + k$$

$$\int \sin x\, dx = -\cos x + k$$

$$\int \sin[f(x)] \cdot f'(x)\, dx = -\cos[f(x)] + k$$

$$\int \cos x\, dx = \sin x + k$$

$$\int \cos[f(x)] \cdot f'(x)\, dx = \sin[f(x)] + k$$

$$\int \frac{1}{\cos^2 x} dx = tgx + k$$

$$\int \frac{f'(x)}{\cos^2[f(x)]} dx = tg[f(x)] + k$$

$$\int \frac{1}{\sqrt{1-x^2}} dx = \arcsin x + k$$

$$\int \frac{f'(x)}{\sqrt{1-[f(x)]^2}} dx = \arcsin[f(x)] + k$$

$$\int \frac{-1}{\sqrt{1-x^2}} dx = ar\cos x + k$$

$$\int \frac{-f'(x)}{\sqrt{1-[f(x)]^2}} dx = ar\cos[f(x)] + k$$

$$\int \frac{1}{1+x^2} dx = arctgx + k$$

$$\int \frac{f'(x)}{1+[f(x)]^2} dx = arctg[f(x)] + k$$