$$0. \qquad \int 1 \ dt = \int dt = t + C$$

1.
$$\int t^n dt = \frac{t^{n+1}}{n+1} + C$$
, $\sin n \neq -1$

$$2. \int \frac{1}{2\sqrt{t}} dt = \sqrt{t} + C$$

$$3. \quad \int e^t \quad dt = e^t + C$$

$$4. \quad \int \frac{1}{t} \, dt = \ln |t| + C$$

$$5. \int \cos(t) dt = \sin(t) + C$$

$$\mathbf{6.} \quad \int \operatorname{sen}(t) \ dt = -\cos(t) + C$$

7.
$$\begin{cases} \int \frac{1}{\cos^2(t)} dt = \tan(t) + C \\ \int (1 + [\tan(t)]^2) dt = \tan(t) + C \end{cases}$$

8.
$$\int \frac{1}{\sqrt{1-t^2}} dt = \arcsin(t) + C$$

9.
$$\int \frac{1}{1+t^2} dt = \arctan(t) + C$$





1.
$$\int [f(t)]^n f'(t) dt = \frac{[f(t)]^{n+1}}{n+1} + C, \sin n \neq -1$$

2.
$$\int \frac{1}{2\sqrt{f(t)}} f'(t)dt = \int \frac{f'(t)}{2\sqrt{f(t)}} dt = \sqrt{f(t)} + C$$

3.
$$\int e^{f(t)} f'(t) dt = e^{f(t)} + C$$

4.
$$\int \frac{1}{f(t)} f'(t) dt = \int \frac{f'(t)}{f(t)} dt = \ln(|f(t)|) + C$$

5.
$$\int \cos(f(t)) f'(x) dt = \sin(f(t)) + C$$

6.
$$\int \text{sen}(f(t)) f'(t) dt = -\cos(f(t)) + C$$

7.
$$\begin{cases} \int \frac{1}{\cos^2(f(t))} f'(t) dt = \int \frac{f'(t)}{\cos^2(f(t))} dt = \tan(f(t)) + C \\ \int (1 + [\tan(f(t))]^2) f'(t) dt = \tan(f(t)) + C \end{cases}$$

8.
$$\int \frac{1}{\sqrt{1-[f(t)]^2}} f'(t) dt = \int \frac{f'(t)}{\sqrt{1-[f(t)]^2}} dt = \arcsin(t) + C$$

9.
$$\int \frac{1}{1+[f(t)]^2} f'(t) dt = \int \frac{f'(t)}{1+[f(t)]^2} dt = \arctan(t) + C$$