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

- $\int \frac{1}{2} x^{-\frac{1}{2}} dx$

$$\int \frac{1}{2} x^{-1/2} dx = \frac{1}{2} \int x^{-1/2} dx = \frac{1}{2} \frac{x^{1/2}}{1/2} + C =$$

$$= x^{1/2} + C$$