$$\bullet \int \frac{1}{2\sqrt{x}}\, dx$$

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

$$\text{Extra:} \quad \frac{d}{dx}\left(\sqrt{x}\right) = \frac{1}{2}\frac{1}{\sqrt{x}}$$