• $\int \frac{1}{x+\sqrt{x}}\,dx$; Utilizar c.v.

$$\int \frac{1}{x+\sqrt{x}}\,dx = \int \frac{1}{t^2+\sqrt{t^2}} \cdot 2t\,dt = (*)$$

$$x = t^2$$
$$dx = 2t\,dt$$

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

$$(*) = 2\int \frac{t}{t^2+t}\,dt = 2\int \frac{1}{t+1}\,dt =$$

$$= 2\ln|t+1| + C = 2\ln|\sqrt{x}+1| + C$$

$$x = t^2$$
$$\Rightarrow t = \sqrt{x}$$