The result of integrating $\int \frac{1}{\sqrt{1+x}} dx$ is given by $2\sqrt{x+1}$ Here is some list of integrations to do

$$\int \frac{1}{\sqrt{1+x}} dx = 2\sqrt{x+1}$$

$$\int \sin x \, dx = -\cos(x)$$

$$\int x \sin x \, dx = -x \cos(x) + \sin(x)$$

$$\int x^2 \sin x \, dx = -x^2 \cos(x) + 2x \sin(x) + 2\cos(x)$$

$$\int xe^{2x} \, dx = \frac{(2x-1)e^{2x}}{4}$$

$$\int \frac{1}{1+u} \, du = \log(u+1)$$