

Універсальні заміни

$$\int F(\sin x, \cos x) dx$$

$$\left| \begin{array}{l} t = \operatorname{tg} \frac{x}{2} \\ \sin x = \frac{2t}{1+t^2} \\ \cos x = \frac{1-t^2}{1+t^2} \\ dx = \frac{2dt}{1+t^2} \end{array} \right|$$

$$\int F(\sin^2 x, \cos^2 x, \sin x \cos x) dx$$

$$\left| \begin{array}{l} t = \operatorname{tg} x \\ \sin^2 x = \frac{t^2}{1+t^2} \\ \cos^2 x = \frac{1}{1+t^2} \\ \sin x \cos x = \frac{t}{1+t^2} \\ dx = \frac{dt}{1+t^2} \end{array} \right|$$