

■ Calculer en utilisant les fonctions composées

$$\int \cos(5x) dx$$

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

$$\int \frac{1}{3x-1} dx$$

$$\int \sec^2(x) \operatorname{tg}(x) dx$$

$$\int e^{6x} dx$$

$$\int \frac{x}{\sqrt{4-x^2}} dx$$

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

■ Solutions

$$\int \cos(5x) dx = \frac{1}{5} \sin(5x) + k$$

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

$$\int x(x^2-3)^4 dx = \frac{1}{10} (x^2-3)^5 + k$$

$$\int \frac{1}{3x-1} dx = \frac{1}{3} \ln(|3x-1|) + k$$

$$\int \sec^2(x) \operatorname{tg}(x) dx = \frac{\sec^2(x)}{2} + k$$

$$\int e^{6x} dx = \frac{e^{6x}}{6} + k$$

$$\int \frac{x}{\sqrt{4-x^2}} dx = -\sqrt{4-x^2} + k$$

$$\int \cos(x) \sin^2(x) dx = \frac{\sin(x)}{4} - \frac{1}{12} \sin(3x) + k$$