9) $\int 10\,dx$

$10\int dx$

$10x + C$ //

10) $\int (5x^3 + 3x^2 + x + 1)\,dx$

$\int 5x^2\,dx + \int 3x^2\,dx + \int x\,dx$

$5\int x^2\,dx + 3\int x^2\,dx + \frac{x^2}{2} + x$

$\frac{5 \cdot x^4}{4} + \frac{3x^3}{3} + \frac{x^2}{2} + x$

$\frac{5x^4}{4} + \frac{3x^3}{3} + \frac{x^2}{2} + x + C$ //

- 10 Ejercicios de integración directa - funciones trigonométricas

11) $\int \operatorname{sen}(x)\,dx$

$-\cos(x) + C$ //

12) $\int \cos(x)\,dx$

$\operatorname{sen}(x) + C$ //

13) $\int \sec^2(x)\,dx$

$\int \frac{1}{\cos^2 x}\,dx$

$\int \frac{\operatorname{sen}^2 x + \cos^2 x}{\cos^2 x}\,dx$

$\int \left(\frac{\operatorname{sen}^2 x}{\cos^2 x} + \frac{\cos^2 x}{\cos^2 x}\right) dx$

$\int (\tan^2 x + 1)\,dx$

$\tan x - x + x + C$

$\tan x + C$ //

14) $\int \csc^2(x)\,dx$

$\int \frac{1}{\operatorname{sen}^2(x)}\,dx$

$\int \frac{\operatorname{sen}^2(x) + \cos^2(x)}{\operatorname{sen}^2(x)}\,dx$

$\int \left(\frac{\operatorname{sen}^2(x)}{\operatorname{sen}^2(x)} + \frac{\cos^2(x)}{\operatorname{sen}^2(x)}\right) dx$

$\int (1 + \cot^2(x))\,dx$

$\int \csc^2(x)\,dx$

$-\cot(x) + C$ //

15) $\int \sec(x)\tan(x)\,dx$

$\int \frac{1}{\cos(x)} \cdot \frac{\operatorname{sen}(x)}{\cos(x)}\,dx$

$\int \sec \cdot \tan(x)\,dx$

$\sec(x) + C$ //

16) $\int \csc(x)\cot(x)\,dx$

$\int \frac{1}{\operatorname{sen}(x)} \cdot \frac{\cos(x)}{\operatorname{sen}(x)}\,dx$

$\int \frac{\cos(x)}{\operatorname{sen}^2(x)}\,dx$

$-\csc(x) + C$ //

17) $\int \tan(x)\,dx$

$\int \frac{\operatorname{sen}(x)}{\cos(x)}\,dx$

$-\int \frac{\operatorname{sen}(x)}{\cos(x)}\,dx$

$-\ln|\cos(x)| + C$ //