

PRIMITIVAS

Calcular

1. $\int x \sqrt{x+1}$

2. $\int \frac{e^{2x}}{1+e^{4x}}$

3. $\int \frac{e^x}{e^{2x} + 2e^x + 1}$

4. $\int \frac{\ln(3x)}{x^2}$

5. $\int \frac{2x+3}{x^2+3x-7}$

6. $\int \sin(3-5x)$

7. $\int e^x \sec^2(e^x)$

8. $\int (1 + \cos^2 x) \sin x$

9. $\int \frac{1}{(x-4)^5}$

10. $\int \frac{2x^2}{x^2+1}$

11. $\int \frac{1}{x^2-1}$

Soluc es

$$1. \quad \frac{2}{5} \sqrt{(x+1)^5} - \frac{2}{3} \sqrt{(x+1)^3}$$

$$2. \quad \frac{1}{2} \operatorname{arctg}(e^{2x})$$

$$3. \quad -\frac{1}{e^x+1}$$

$$4. \quad \frac{1}{2} \left(-\frac{1}{x} \ln(3x) - \frac{1}{x} \right)$$

$$5. \quad \ln |x^2+3x+2|$$

$$6. \quad -\frac{1}{5} \cos(3-5x)$$

$$7. \quad \operatorname{tg}(e^x)$$

$$9. \quad -\frac{1}{4} \frac{1}{(x-4)^4}$$

$$8. \quad -\cos x - \frac{\cos^3 x}{3}$$

$$10. \quad 2(x - \operatorname{arctg} x)$$

$$11. \quad \frac{1}{2} (\ln|x-1| - \ln|x+1|)$$

$$1. P \frac{1}{1+e^{-x}}$$

$$2. P \frac{\sqrt{x-1}}{x}$$

$$3. P \frac{1-e^x}{1+e^x}$$

$$4. P \frac{x-3}{x^2+x^3}$$

$$5. P \frac{1}{\sqrt{1+e^x}}$$

$$6. P \frac{e^{3x}}{(1+e^{3x})^2}$$

$$7. P \frac{\log x}{\sqrt{1+x}}$$

$$8. P x^2 \operatorname{arctg} x$$

$$9. P (1+\cos^2 x) \sin x$$

$$10. P \frac{x+16}{(x-1)^2}$$

$$11. P \frac{e^{2x}}{e^x+4}$$

$$12. P \frac{\sin x}{\sqrt{1+\cos x}}$$

$$13. P \cos^3 x$$