

Esercizi sugli integrali indefiniti

- 1) $\int (3x+1)dx = 3\int xdx + \int 1dx = \frac{3}{2}x^2 + x + c$
- 2) $\int \left(x^3 - 2x^2 - \frac{1}{2}x\right)dx = \int x^3dx - 2\int x^2dx - \frac{1}{2}\int xdx = \frac{x^4}{4} - \frac{2x^3}{3} - \frac{x^2}{4} + c$
- 3) $\int (6x^3 - 3x^2 - 4x - 1)dx = \dots = \frac{3x^4}{2} - x^3 - 2x^2 - x + c$
- 4) $\int (x^2 - 7x)(-x + 5)dx =$
- 5) $\int (x\sqrt{x} + 2)dx = \dots = \frac{2}{5}x^{\frac{5}{2}} + 2x + c$
- 6) $\int (\sqrt[4]{x^3} - x\sqrt[3]{x})dx =$
- 7) $\int (x^2\sqrt{x} - 3\sqrt[3]{x^2})dx =$
- 8) $\int \left(\frac{2x^5 - 6x^2 + 5x - 2}{x^4}\right)dx = \dots = x^2 + \frac{6}{x} - \frac{5}{2x^2} + \frac{2}{3x^3} + c$
- 9) $\int \left(\frac{2x^5 - 3x^2 + 7x - 1}{x^5}\right)dx =$
- 10) $\int \left(\frac{x^4 + 2x^2 - 5x}{x^5}\right)dx =$
- 11) $\int \left(\frac{2x^2 + 3x - 1}{x}\right)dx =$
- 12) $\int \left(\frac{4x^2 - 3x + 7}{-x}\right)dx =$
- 13) $\int \left(5x - \frac{1}{x} + \frac{3x^2 - 8x}{x^3}\right)dx =$
- 14) $\int \left(2x - \frac{1}{x} + \frac{3x^2 - 5x}{x^3}\right)dx =$
- 15) $\int \frac{4}{5x+6}dx = \frac{4}{5} \int \frac{5}{5x+6}dx = \frac{4}{5} \log|5x+6| + c$
- 16) $\int \frac{16}{2x-15}dx =$
- 17) $\int \frac{-6}{3x-1}dx =$
- 18) $\int \frac{4}{17-x}dx =$

$$19) \int \frac{\sqrt{2}}{2 + \sqrt{10x}} dx =$$

$$20) \int \left(\frac{-2}{4x+1} + \frac{5}{10x-2} \right) dx =$$

$$21) \int \frac{6x-3}{2x+3} dx = \dots = 3x - 6 \log|2x+3| + c$$

$$22) \int \frac{4x-7}{2x-3} dx =$$

$$23) \int \frac{4x^3 - x + 2}{2x-1} dx =$$

$$24) \int \frac{x^3 - 2x^2 - 6}{x-5} dx =$$

$$25) \int \frac{x + \frac{1}{x}}{1 - \frac{1}{x}} dx =$$

Altri esercizi

$$26) \int \left(x^2 - \frac{1}{x} \right) \left(x + \frac{2}{x^3} \right) dx =$$

$$27) \int (3x-1)^2 \left(x - \frac{1}{x^3} \right) dx =$$

$$28) \int \left(-2x^2 \sqrt[3]{x^2} + \frac{1}{3} \sqrt[4]{x^3} \right) dx =$$

$$29) \int \left(\frac{4x^3 - 5x^2 - 6x - 1}{12x^4} \right) dx =$$

$$30) \int \frac{10}{12x+3} dx =$$

$$31) \int \frac{4x-7}{2x+3} dx =$$

$$32) \int \frac{6x+11}{3x-8} dx =$$

$$33) \int \frac{9x-10}{3x+4} dx =$$

$$34) \int \frac{x^3+1}{x-1} dx =$$

$$35) \int \left(\left(x^2 - \frac{1}{2} \right) : \left(x - \frac{1}{2} \right) \right) dx =$$