

Answer on Question #46128 – Math – Integral Calculus

Integrate with respect to x :

$$\int_{-1}^3 \frac{x}{\sqrt{7+x^2}} dx$$

note 3 -1 means that 3 superscript, -1subscript

$$22\sqrt{2}$$

$$42\sqrt{2}$$

$$4-22\sqrt{2}$$

$$2\sqrt{2}$$

Answer.

$$\int_{-1}^3 \frac{x}{\sqrt{7+x^2}} dx = \frac{1}{2} \int_{-1}^3 \frac{d(7+x^2)}{\sqrt{7+x^2}} = \sqrt{7+x^2} \Big|_{x=-1}^{x=3} = 4 - 2\sqrt{2} .$$

(answer #3)