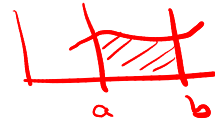


$$f = x^2 + x - 3$$

$$g = -x^2 - 2x + 2$$

$f - g$

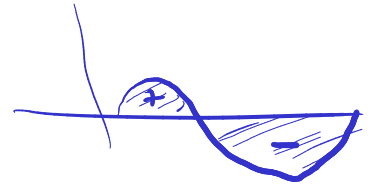


$$x^2 + x - 3 = -x^2 - 2x + 2$$

$$2x^2 + 3x - 5 = 0$$

$$x_1 = 1$$

$$x_2 = -\frac{5}{2}$$



$$\int_{-2.5}^1 (-x^2 - 2x + 2 - (x^2 + x - 3)) dx =$$

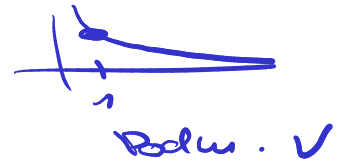
$$\int_{-2.5}^1 -2x^2 - 3x + 5 dx = \left[-\frac{2}{3}x^3 - \frac{3}{2}x^2 + 5x \right]_{-2.5}^1 =$$

$$= -\frac{2}{3} - \frac{9}{2} + 5 - \left(\frac{250}{54} - \frac{75}{8} - \frac{25}{2} \right) = \frac{343}{24} \quad \therefore$$

$$h = f - g$$

$$\sum a_n$$

$$f(x) = f(n) = a_n$$



Belu. \checkmark

$$\sum_{n=1}^{\infty} \frac{1}{n^2} \quad \checkmark$$

\Leftrightarrow

$$\int_1^{\infty} \frac{1}{x^2} dx \quad \checkmark$$

$$= \left[-\frac{1}{x} \right]_1^{\infty} = 0 - (-1) = 1 = \checkmark$$

Konv.

$$\text{Zurück } \sum \frac{1}{n^2} \checkmark \quad \therefore$$