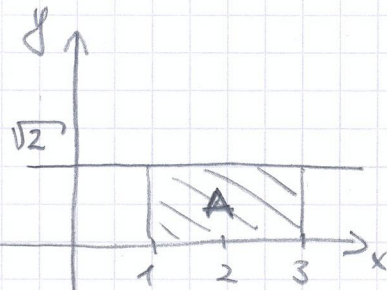


A2

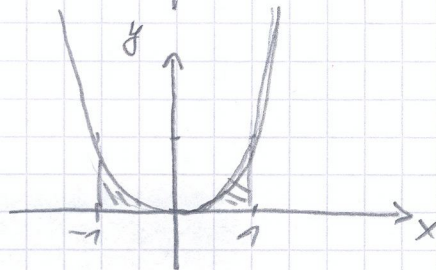
$$a) \int_1^3 \sqrt{2} dx = A = \sqrt{2} \cdot 2 = 2\sqrt{2}$$



$$b) \int_{-1}^1 x^4 dx =$$

$$= 2 \cdot \int_0^1 x^4 dx = 2 \left[\frac{1}{5} x^5 \right]_0^1 =$$

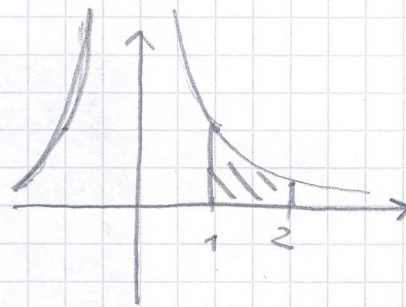
$$= 2 \cdot \left(\frac{1}{5} - 0 \right) = \frac{2}{5}$$



$$c) \int_1^2 \frac{1}{x^2} dx = \int_1^2 x^{-2} dx =$$

$$= \left[-x^{-1} \right]_1^2 =$$

$$= \left[-\frac{1}{x} \right]_1^2 = -\frac{1}{2} + 1 = \frac{1}{2}$$



$$d) \int_1^3 \sqrt{x} + 3 dx =$$

$$= \int_1^3 x^{\frac{1}{2}} + 3 dx =$$

$$= \left[\frac{2}{3} x^{\frac{3}{2}} + 3x \right]_1^3 \approx 12,46 - 3,67 = 8,8$$

