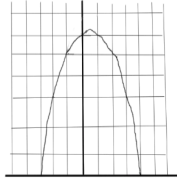# Area. Riemann sums. Definite integrals
Homework problems for video (3)
Anwers in video (4)

Answer the following two questions for the function y=f(x) graphed below.

(a) Divide the interval [−2,2] into four subintervals of equal length. Then sketch the corresponding rectangles by using left endpoints.

(b) Find the Riemann sum for y=f(x) on the interval [−2,2] for n=4 taking the sample points to be left endpoints.

(c) Express $\lim\limits_{n \to \infty} \sum\limits_{n=1}^{\infty} \dfrac{\sqrt{1 + x_i^*}}{(x_i^*)^2} \Delta x$ as a definite integral on the interval [2,7]. Do not evaluate.