

Rezolvare

1.  $f$  este strict descrescătoare pe  $[-2,1] \Rightarrow$  cea mai mică valoare este  $f(1) = -2$ .

2.  $f(1) + f(2) + \dots + f(6) = 1 + 3 + \dots + 11 = 36$ .

$$3. \begin{cases} 2x+5 > 0 \\ x^2+3x+3 > 0 \end{cases} \Rightarrow x \in \left(-\frac{5}{2}, \infty\right).$$

$$2x+5 = x^2+3x+3 \Rightarrow \begin{cases} x=1 \in \left(-\frac{5}{2}, \infty\right) \\ x=-2 \in \left(-\frac{5}{2}, \infty\right) \end{cases}.$$

$$4. C_4^2 = 6, C_5^2 = 10, C_4^3 = 4 \Rightarrow p = \frac{1}{3}.$$

$$5. \text{Fie } M \text{ mijlocul lui } BC \Rightarrow M\left(\frac{5}{2}, \frac{7}{2}\right).$$

$$AM = \sqrt{\left(2 - \frac{5}{2}\right)^2 + \left(3 - \frac{7}{2}\right)^2} = \frac{\sqrt{2}}{2}.$$

$$6. \sin 60^\circ - \cos 30^\circ = \frac{\sqrt{3}}{2} - \frac{\sqrt{3}}{2} = 0.$$