

ZAD 16

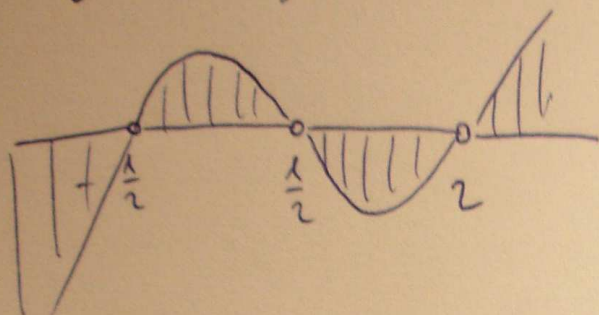
$$4x^3 - 8x^2 - x + 2 > 0$$

$$4x^2(x-2) - (x-2) > 0$$

$$(4x^2 - 1)(x-2) > 0$$

$$(2x-1)(2x+1) \quad x-2$$

$$x_1 = \frac{1}{2} \quad x_2 = -\frac{1}{2} \quad x_3 = 2$$



$$x \in \left(-\frac{1}{2}; \frac{1}{2}\right) \cup (2; +\infty)$$

ZAD 17

$$2x^3 + x^2 - x - 2 < 0$$

szukam podzielników ułamku wolnego „-2”

wp. $x=1$ $2 \cdot 1^3 + 1 - 1 - 2 = 2 + 1 - 3 = 3 - 3 = 0$

„1” jest pierwiastkiem więc dokonuję dzielenia

$$(2x^3 + x^2 - x - 2) : (x-1) = 2x^2 + 3x + 2$$

$$\begin{array}{r} 2x^3 + x^2 - x - 2 \\ -2x^3 + 2x^2 \hline \end{array}$$

$$= 3x^2 - x$$

$$\begin{array}{r} 3x^2 - x \\ -3x^2 + 3x \hline \end{array}$$

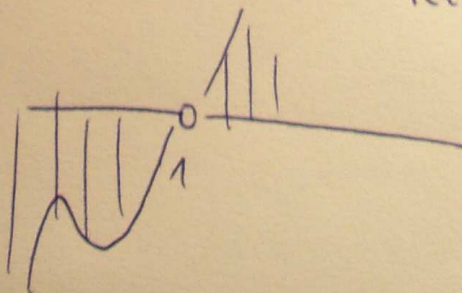
$$= 2x - 2$$

$$\begin{array}{r} 2x - 2 \\ -2x + 2 \hline \end{array}$$

$$= 0$$

$$\Delta = 9 - 4 \cdot 2 \cdot 2$$

$\Delta < 0$ brak pierwiastków rzeczywistych



$$x \in (-\infty; 1)$$