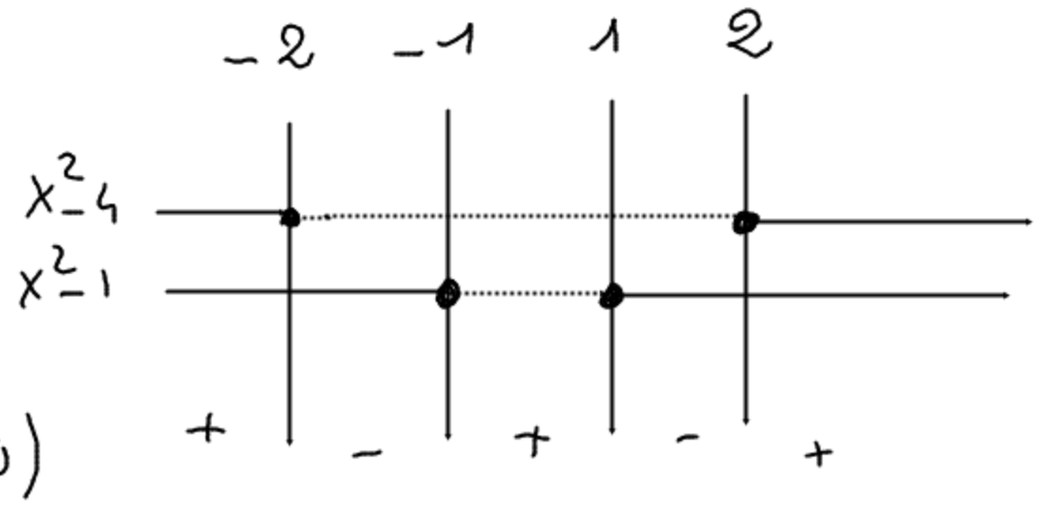
$y = x^4 - 5x^2 + 4$ $\quad D = \mathbb{R}$ $\quad D =]-\infty; +\infty[$

$y = (x^2 - 4)(x^2 - 1)$

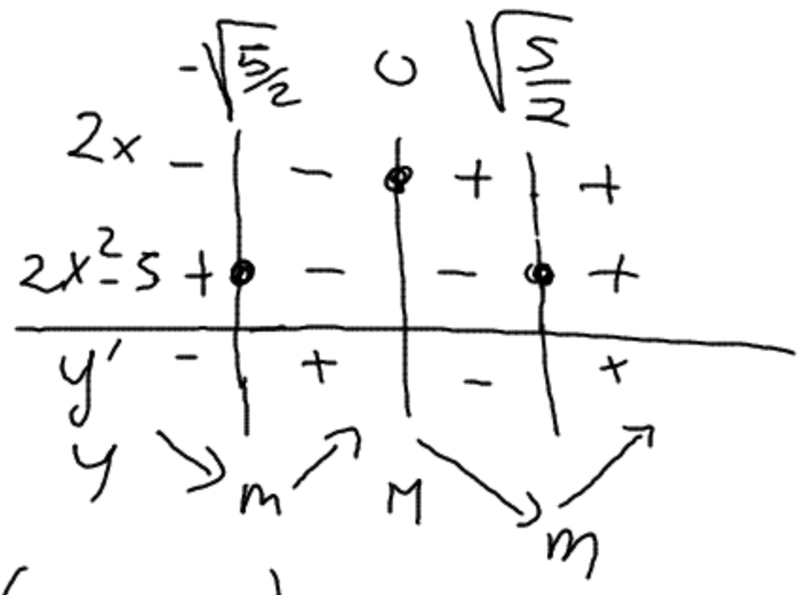


int. ass.

$(0;4)$ $(-2;0)$ $(-1;0)$ $(1;0)$ $(2;0)$

$y' = 4x^3 - 10x$

$y' = 2x(2x^2 - 5)$



$m_1 = (-1{,}58; -2{,}25)$

$M = (0; 4)$

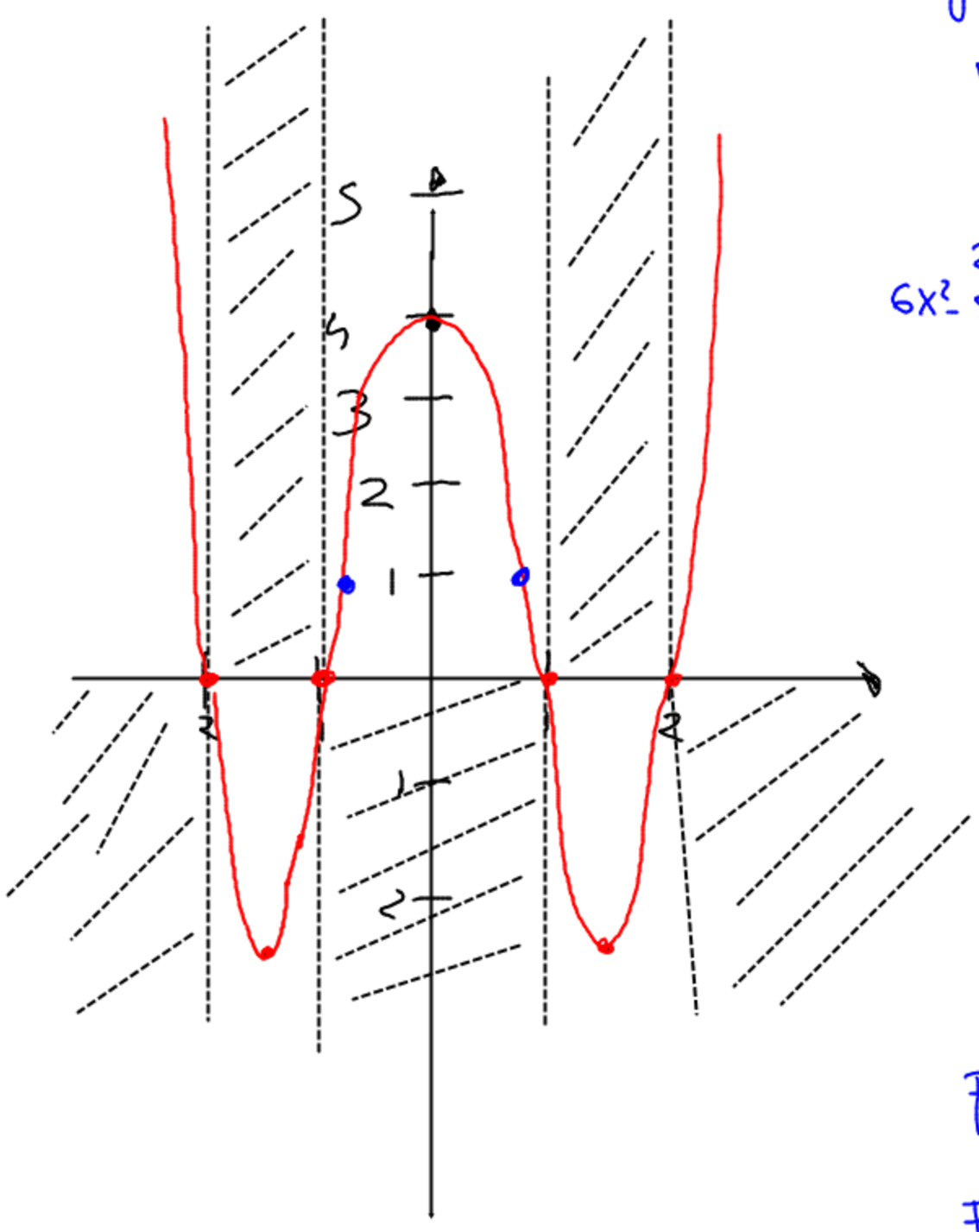
$m_2 = (1{,}58; 2{,}25)$

$y_m = f(-\sqrt{\frac{5}{2}}) = (-\sqrt{\frac{5}{2}})^4 - 5(-\sqrt{\frac{5}{2}})^2 + 4 =$

$= \frac{25}{4} - \frac{25}{2} + 4 = \frac{25 - 50 + 16}{4} =$

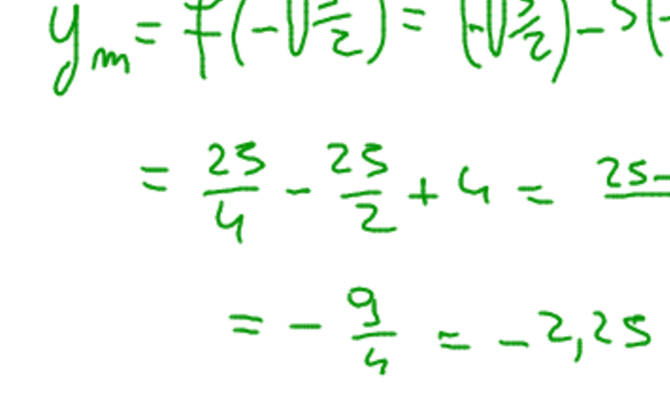
$= -\frac{9}{4} = -2{,}25$

$y_M = f(\sqrt{\frac{5}{2}}) = \frac{25}{4} - \frac{25}{2} + 4 = -\frac{9}{4}$



$y'' = 12x^2 - 10$

$y'' = 2(6x^2 - 5)$



$y_{F_1} = (-\sqrt{\frac{5}{6}})^4 - 5(-\sqrt{\frac{5}{6}})^2 + 4 =$

$= \frac{25}{36} - \frac{25}{6} + 4 = \frac{25 - 150 + 144}{36} =$

$= \frac{19}{36}$

$y_{F_2} = f(\sqrt{\frac{5}{6}}) = \frac{19}{36}$

$F_1(-\sqrt{\frac{5}{6}}; \frac{19}{36})$

$F_2(\sqrt{\frac{5}{6}}; \frac{19}{36})$

Per domani studiare:

$y = 4x^3 - 11x^2 - 4x + 11$