$f(x) = 2x^2 - 3x - 5$

$2x^2 + bx + c = 0 \qquad \Delta = b^2 - 4 \cdot a \cdot c$

$c = -5$

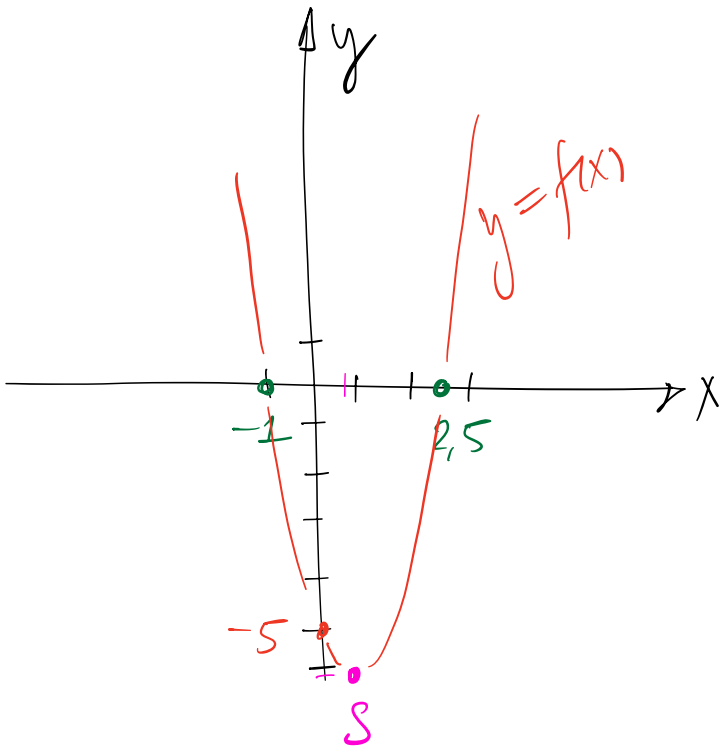
$\Delta = (-3)^2 - 4 \cdot 2 \cdot (-5)$

$= 9 + 40 = 49$

$x = \dfrac{-(-3) + \sqrt{49}}{4}$

$= \dfrac{3+7}{4} = 2{,}5$

$x = \dfrac{3-7}{4} = -1$



Sommet: $-\dfrac{b}{2a} = -\dfrac{(-3)}{2 \cdot 2} = \dfrac{3}{4} = 0{,}75$

$f(0{,}75) = 2 \cdot (0{,}75)^2 - 3 \cdot 0{,}75 - 5$

$= 2 \cdot 0{,}5625 - 2{,}25 - 5$

$= 1{,}15 - 2{,}25 - 5$

$= -6{,}1$

$f(x) = -\frac{1}{2}x^2 + \frac{4}{3}x - 1$

$a = -\frac{1}{2} \quad b = \frac{4}{3} \quad c = -1$

$= -0{,}5 \cdot x^2 + 1{,}\overline{3} \cdot x - 1$

$\Delta = b^2 - 4 \cdot a \cdot c$

$= \left(\frac{4}{3}\right)^2 - 4 \cdot \left(-\frac{1}{2}\right) \cdot (-1)$

$= \frac{16}{9} - \frac{4}{2} = \frac{16}{9} - 2$

$= \frac{16}{9} - \frac{18}{9} = -\frac{2}{9}$