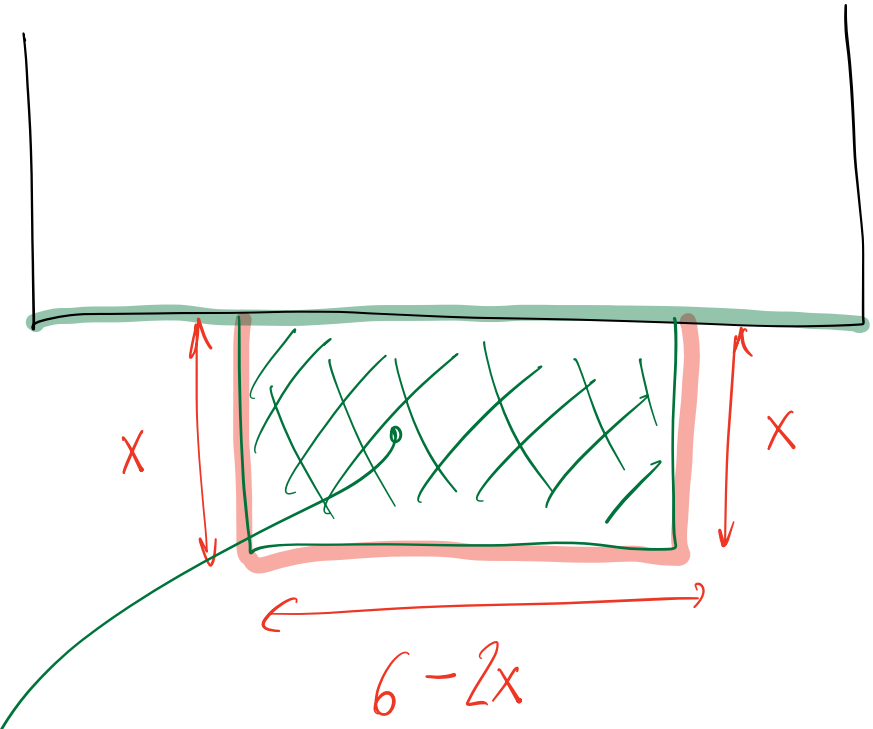
2.10



Surface, area: $x \cdot (6-2x) = 6x - 2x^2$

$= -2x^2 + 6x + 0 = f(x)$

$a < 0 \Rightarrow$ concave



zeros: $\Delta = b^2 - 4ac = 6^2 - 4 \cdot (-2) \cdot 0 = 36$

$x_{1,2} = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ $(c=0)$

$(x_1; 0)$ $(x_2; 0)$

$x_1 = \frac{-6 + \sqrt{36}}{-4} = 0$

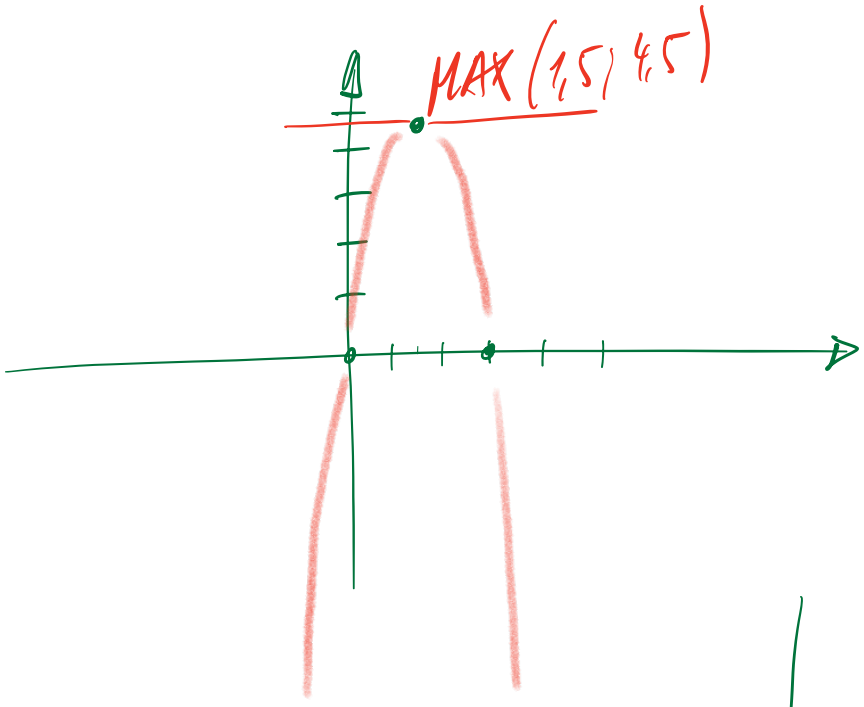
$x_2 = \frac{-6 - \sqrt{36}}{-4} = 3$

0.0: $f(0)$ $(0; f(0))$

$(0; 0)$

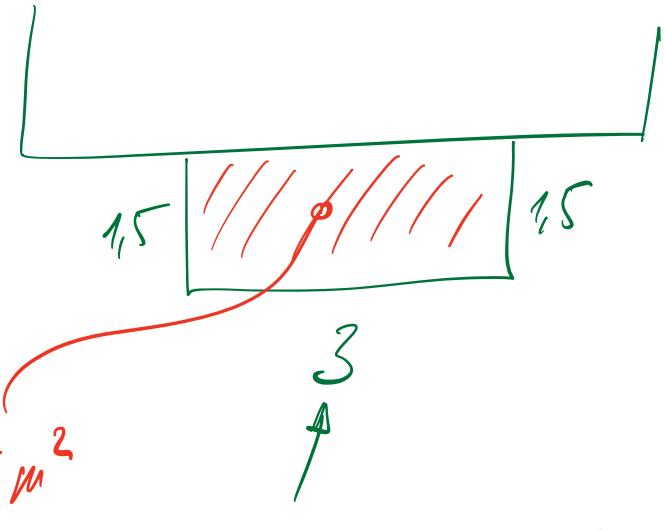
$S\left(-\frac{b}{2a}; -\frac{\Delta}{4a}\right)$: $S(1,5; 4,5)$

$-\frac{6}{2 \cdot (-2)} = \frac{6}{4} = 1,5$ $\Big/ -\frac{36}{4(-2)} = 4,5$



La surface est maximale si les dimensions de l'enclos sont :

1,5 m × 3 m



$4{,}5\ m^2$

$6 - 2 \cdot 1{,}5 = 3$