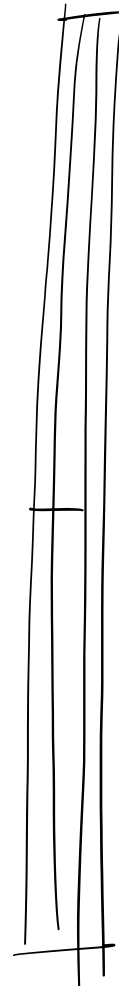
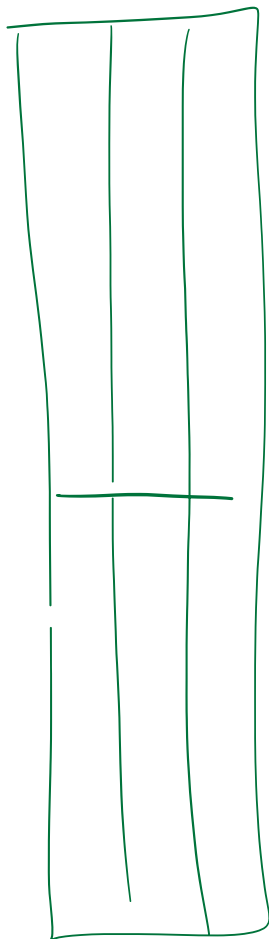
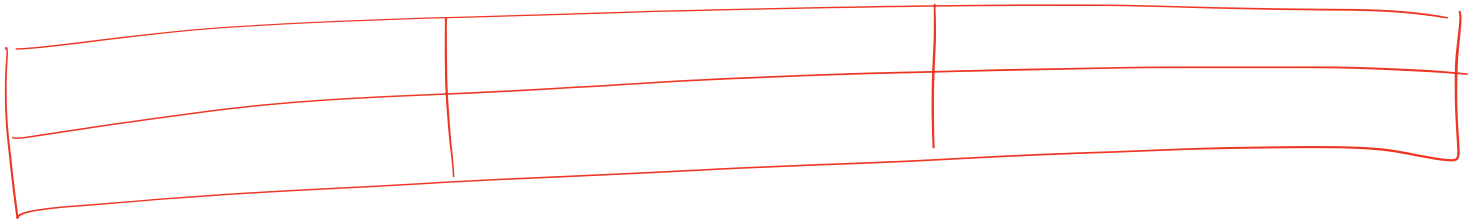
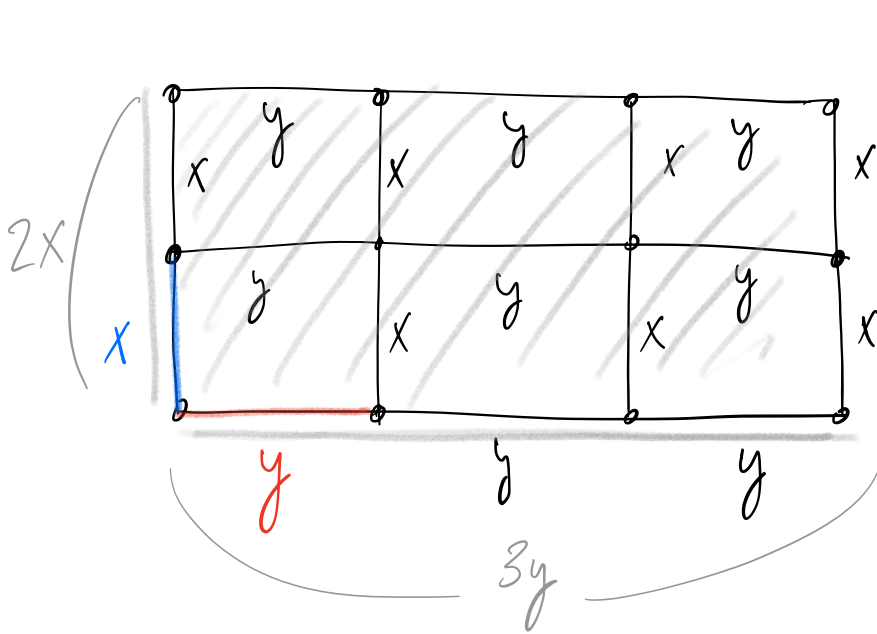


288 m



cloture





Aire
 ↑
 fonction $f(x)$

288 m

$$8x + 9y = 288$$

$$y = \frac{288 - 8x}{9}$$

$$A(x) = 6xy$$

Contraintes :

$$x, y \geq 0$$

$$8x < 288$$

$$x < 36$$

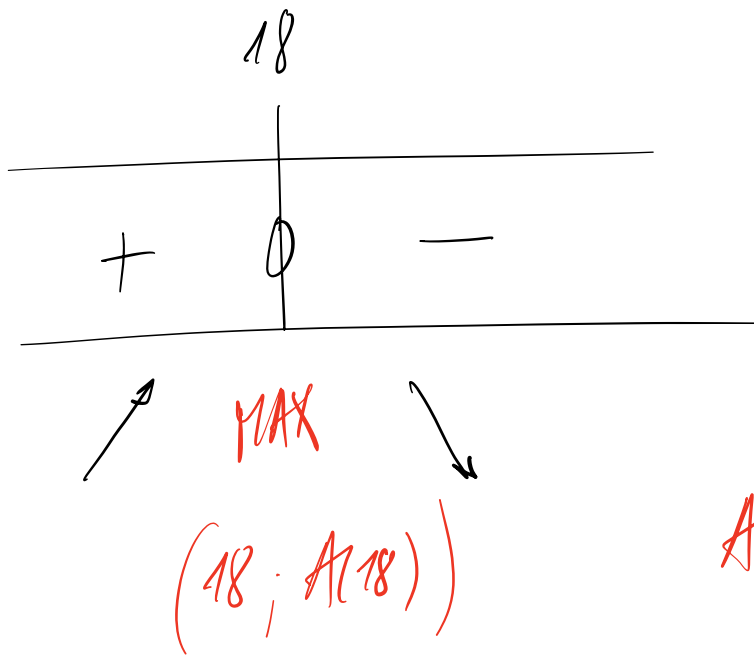
$$A(x) = 6 \cdot x \cdot \frac{288 - 8x}{9} = \frac{2}{3} (288x - 8x^2)$$

Étudier la croissance de A

sur $[0; 36]$

$$A'(x) = \frac{2}{3} (288 - 16x)$$

$$A'(x) = 0 \Leftrightarrow x = \frac{288}{16} = 18$$



$$A(18) = \frac{2}{3}(288 \cdot 18 - 8 \cdot 18^2)$$

$$= \frac{2}{3} 2592$$

$$= 1728$$

$$x = 18$$

$$y = \frac{288 - 8 \cdot 18}{9} = 16$$

Les dimensions d'un enclos rectangulaire sont:

18 m par 16 m

