10.10 f

$$\frac{5-8x}{2} - \frac{8x^2+5}{6} = \frac{1-12x^2}{3}$$

$\cdot 6$? Fractions

$$\frac{(5-8x)}{2} \cdot \frac{3}{1} - \frac{(8x^2+5)}{6} \cdot \frac{1}{1} = \frac{1-12x^2}{3} \cdot \frac{6}{1}^{2}$$

$$(5-8x)\cdot 3 - (8x^2+5)\cdot 1 = (1-12x^2)\cdot 2$$

$$15 - 24x - 8x^2 - 5 = 2 - 24x^2$$

$$24x^2 - 8x^2 - 24x + 15 - 5 - 2 = 0$$

$$16x^2 - 24x + 8 = 0 \quad \div 8$$

$$2x^2 - 3x + 1 = 0$$

$\Delta = 9 - 4 \cdot 2 \cdot 1 = 1$ $\qquad \sqrt{1} = 1$

$\sqrt{\Delta} = 1$

$$x = \frac{3 \pm 1}{4}$$

1

$\frac{2}{4} = 0,5$

$S = \{0,5 ; 1\}$

$x = 1$ ou $x = 0,5$

10.11 g)

$$\frac{5-4x}{2} + \frac{3x^2-1}{3} = \frac{2x^2+5}{6} \quad \Big| \cdot 6$$

$$(5-4x)\cdot 3 + (3x^2-1)\cdot 2 = 2x^2+5$$

$$15 - 12x + 6x^2 - 2 = 2x^2 + 5$$

$$6x^2 - 2x^2 - 12x + 15 - 2 - 5 = 0$$

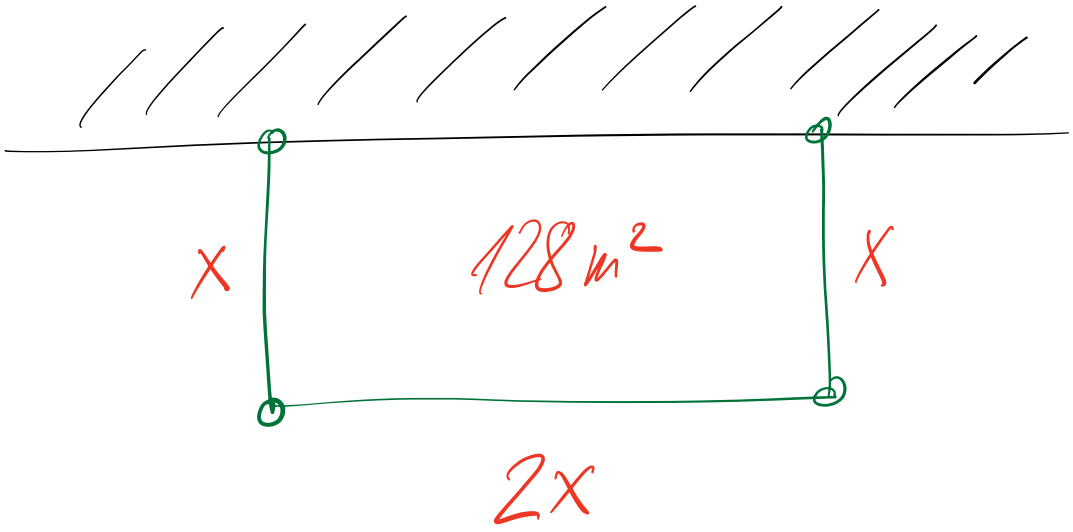
$$4x^2 - 12x + 8 = 0$$

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

$$(x-1)(x-2) = 0$$

$$x = 1 \text{ ou } x = 2$$

10.19



$2x \cdot x = 128$

$2x^2 = 128$

$x^2 - 64 = 0$

$x^2 = 64$

$0 \cdot 0 = 0^2$

$0 - 0 = 0$ $\quad 0 + 0 = 0$

$x^2 + 0x - 64 = 0$

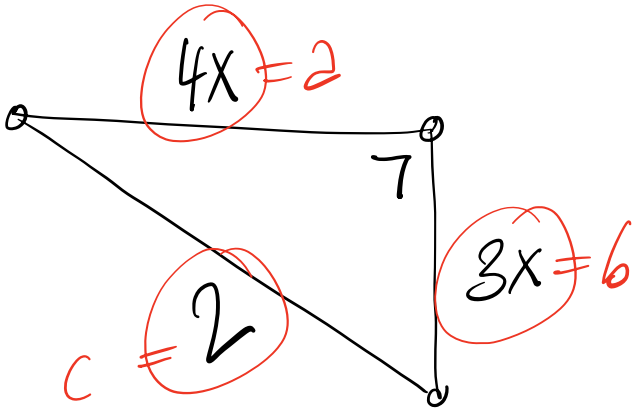
$$x = \frac{-0 \pm \sqrt{0^2 - 4 \cdot 1 \cdot (-64)}}{2}$$

$$= \frac{\pm \sqrt{256}}{2} = \frac{\pm 16}{2}$$

$\Rightarrow 4x = 32$

Le longueur totale de la barrière sont 32 m.

10.20



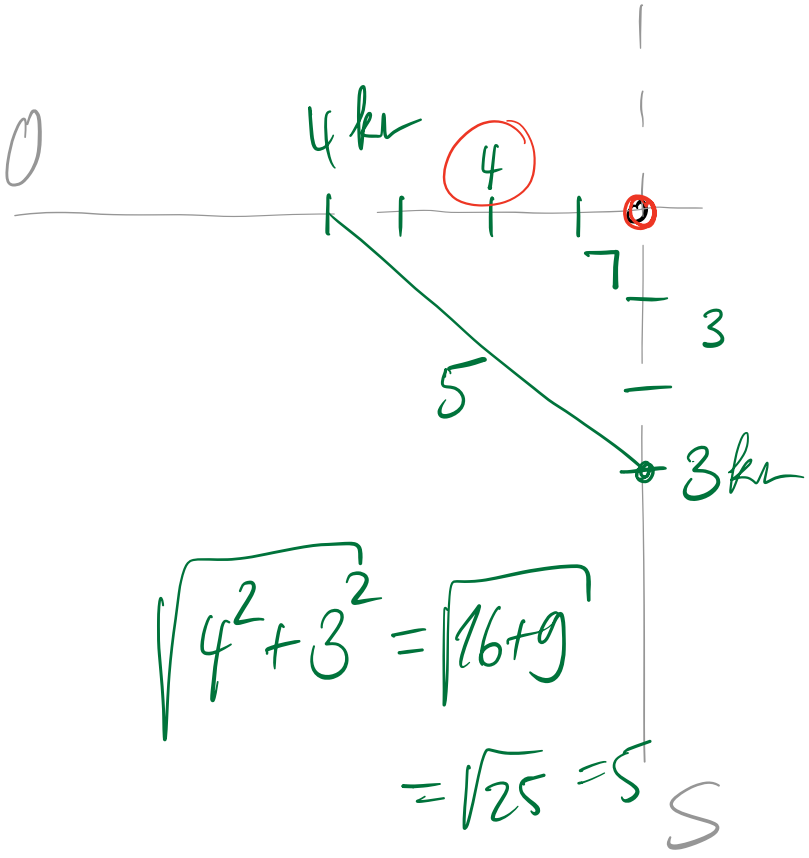
$a^2 + b^2 = c^2$

Après x heures

$4\,km/h \cdot x\,h$

$4x$ km

$V = \frac{d}{t} \mid v \cdot t = d$



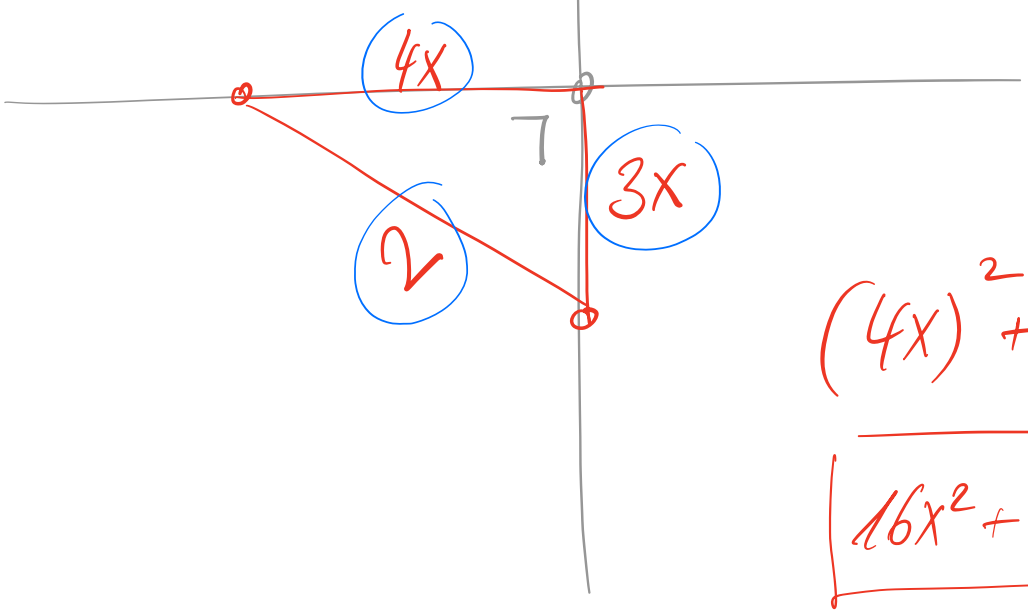
Après 1h

$\sqrt{4^2 + 3^2} = \sqrt{16+9}$

$= \sqrt{25} = 5$

$V = \frac{d}{t}$ $\quad 4 = \frac{d}{x}$ $\quad d = 4x$

Après x heures



$(4x)^2 + (3x)^2 = 4$

$16x^2 + 9x^2 = 4$

A résoudre