

Correction de l'interro 1

exo 1

$$A = \frac{3}{7} - \frac{2}{7} \times \frac{1}{4}$$

$$A = \frac{3}{7} - \frac{2 \times 1}{7 \times 4}$$

$$A = \frac{3}{7} - \frac{2}{28}$$

$$A = \frac{3 \times 4}{28} - \frac{2}{28}$$

$$A = \frac{12-2}{28}$$

$$A = \frac{10}{28}$$

$$B = \frac{1}{4} + \frac{1}{6} + \frac{13}{8}$$

$$B = \frac{1 \times 6}{4 \times 6} + \frac{1 \times 4}{6 \times 4} + \frac{13 \times 3}{8 \times 3}$$

$$B = \frac{6}{24} + \frac{4}{24} + \frac{39}{24}$$

$$B = \frac{49}{24}$$

$$C = \frac{1 - \frac{1}{2}}{\frac{1}{4} + \frac{1}{8}}$$

$$C = \frac{\frac{2}{2} - \frac{1}{2}}{\frac{2}{8} + \frac{1}{8}}$$

$$C = \frac{\frac{1}{2}}{\frac{3}{8}}$$

$$C = \frac{1}{2} \times \frac{8}{3}$$

$$C = \frac{1 \times 2 \times 4}{2 \times 3}$$

$$C = \frac{4}{3}$$

exo 2

$$1) \quad B = \frac{3 \times 10^5 \times 8 \times 10^3}{12 \times 10^9}$$

$$D = \frac{3 \times 8}{12} \times 10^{5+3-9}$$

$$D = \frac{24}{12} \times 10^{-1}$$

$$D = 2$$

$$2) \quad E = 2,5 \times 10^{-4} + 3 \times 10^{-3}$$

$$E = 2,5 \times 10^{-4} + 30 \times 10^{-4}$$

$$E = 32,5 \times 10^{-4}$$

$$E = 3,25 \times 10^{-3}$$

exo 3

$$1. \quad 1 - \left(\frac{4}{15} + \frac{1}{4} + \frac{17}{60} \right) = 1 - \left(\frac{4 \times 4}{15 \times 4} + \frac{1 \times 15}{4 \times 15} + \frac{17}{60} \right)$$

$$= 1 - \left(\frac{16}{60} + \frac{15}{60} + \frac{17}{60} \right)$$

$$= 1 - \frac{48}{60}$$

$$= 1 - \frac{4 \times 12}{5 \times 12}$$

$$= 1 - \frac{4}{5}$$

$$= \frac{5}{5} - \frac{4}{5}$$

$$= \frac{1}{5}$$

$$2. \quad 14 \times 5 = 70 \text{ min soit } 1 \text{ h } 10 \text{ min.}$$

exo 4

$$1. \quad 49x^2 - 25 = (7x)^2 - 5^2 \\ = (7x+5)(7x-5)$$

$$2. \quad F = (5+7x)(8-x) - (49x^2 - 25) \\ F = (5+7x)(8-x) - (7x+5)(7x-5)$$

$$F = (7x+5)[(8-x) - (7x-5)]$$

$$F = (7x+5)(8-x-7x+5)$$

$$F = (7x+5)(-7x+13)$$

exo 5

$$1. \quad (a-b)(a+b) - a^2 = a^2 - b^2 - a^2 \\ = -b^2$$

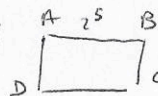
$$2. \quad \text{On pose } a = 8454740 \quad b = 1$$

$$\text{On a } S = (a-b)(a+b) - a^2$$

$$S = -b^2$$

$$S = -1$$

exo 6



$$1) \quad \text{Area } (ABCD) = AB \times AD$$

$$2'' = 2^5 \times AD$$

$$AD = \frac{2''}{2^5} = 2''^{-5} = 2^6$$

$$2. \quad \text{Perimetre } (ABCD) = 2 \times (AB + AD)$$

$$= 2 \times (2^5 + 2^6)$$

$$= 2^6 + 2^7$$

$$= 2^6(1+2)$$

$$= 3 \times 2^6$$

exo 7

$$1) \quad \cdot 1$$

$$\cdot 1+1=2$$

$$\cdot 2^2=4$$

$$\cdot 4-1^2=3$$

$$2) \quad \cdot 2$$

$$\cdot 2+1=3$$

$$\cdot 3^2=9$$

$$\cdot 9-2^2=5$$

$$3) \quad \cdot -3$$

$$\cdot -3+1=-2$$

$$\cdot (-2)^2=4$$

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

$$4) \quad \cdot x$$

$$\cdot x+1$$

$$\cdot (x+1)^2$$

$$\cdot (x+1)^2 - x^2$$

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

$$= 2x + 1$$

5) $2x$ est un

nombre pair

car multiple

de 2.

$2x+1$ est le

nombre suivant

c'est donc un nombre

impair