

2.2.6 } Groupieren

2.2.7 }

2.3.1 }

2.3.2 }

Dinser

Algebre

1.2.14

→ 1^{er} novembre

(rentrée d'automne)

Epreuve de CB (45') : mercredi 1^{er} novembre

NOVEMBRE 2022 A

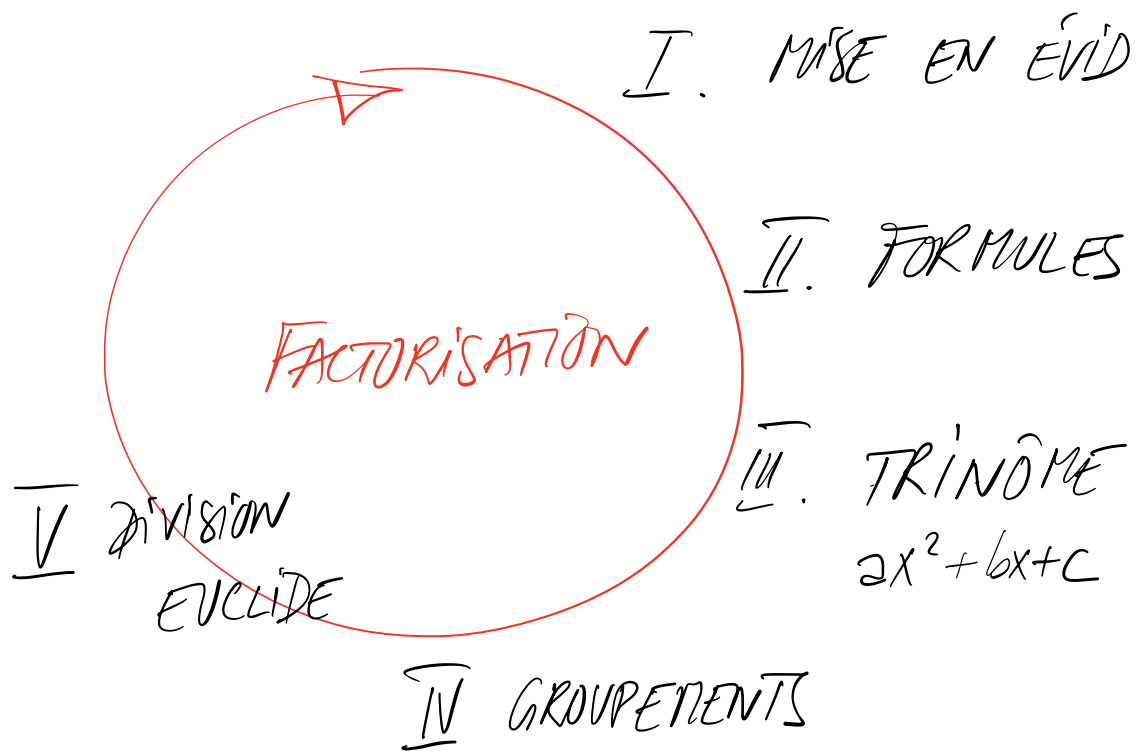
$$\begin{array}{r|l} 103 & 18 \\ 90 & 5 \\ \hline 13 & \end{array}$$

$$103 = \underbrace{18 + 18 + \dots + 18}_{?}$$

Diagram illustrating the division process with labels:

- 103 is labeled **DIVIDENDE** (Dividend)
- 18 is labeled **DIVISEUR** (Divisor)
- 5 is labeled **QUOTIENT** (Quotient)
- 13 is labeled **RESTE** (Remainder)

$$103 = 18 \cdot 5 + 13$$



$$\begin{array}{r}
 \boxed{x^2 + 3x - 2} \\
 - (x^2 + 2x) \\
 \hline
 \boxed{x} - 2 \\
 - (x + 2) \\
 \hline
 -4
 \end{array}$$

$$\begin{array}{r}
 \boxed{x+2} \\
 \boxed{x+1}
 \end{array}$$

$$\begin{array}{l}
 x^2 = x \cdot \dots \\
 = x \cdot (x) \\
 \hline
 x = x \cdot 1
 \end{array}$$

$$x^2 + 3x - 2 = \boxed{(x+2)(x+1)} \text{ (QUOTIENT)} - 4 \text{ (RESTE)}$$

$$x = \frac{-3 \pm \sqrt{17}}{2}$$

$$x^2 + 3x - 2 = \left(x + \frac{3 + \sqrt{17}}{2} \right) \left(x + \frac{-3 + \sqrt{17}}{2} \right)$$

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

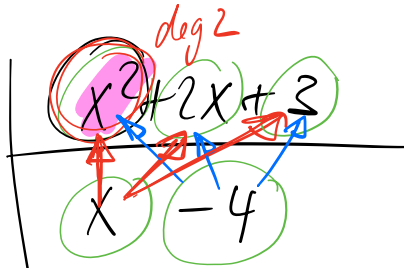
$$\underline{x^3 + 2x^2 + 3x}$$

$$-4x^2 \quad -1$$

$$\underline{-4x^2 - 8x - 12}$$

$$8x + 11$$

deg 1



$$x^3 = x^2 \cdot x$$

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

~~$$8x = x^2 \cdot ?$$~~

$$x^3 - 2x^2 + 3x - 1 = (x^2 + 2x + 3)(x - 4) + 8x + 11$$

2.3.1

2.3.2

$$x^3 - 8x^2 + 16x - 5$$

$$x^3 - 5x^2$$

$$\underline{-3x^2 + 16x - 5}$$

$$\underline{-3x^2 + 15x}$$

$$\begin{array}{r} x - 5 \\ \hline x^2 - 3x \end{array}$$

$$x^3 = x \cdot (x^2)$$

$$-3x^2 = x \cdot (-3x)$$

$$x^4 - 3x^3 + 0x^2 + x - 5$$

$$\begin{array}{r} x^2 + 0x - 3 \\ \hline \end{array}$$

$$\frac{2}{5}x^4 + \dots$$

$$\begin{array}{r} -\frac{3}{5}x \\ \hline -\frac{2}{3}x^3 \end{array}$$

$$\frac{2}{5}x^4 = ? \cdot \left(-\frac{3}{5}x\right)$$

$$= \frac{-2}{3}x^3 \cdot \left(-\frac{3}{5}x\right)$$

$$\frac{2}{5}x^4 = A \cdot \left(-\frac{3}{5}x\right)$$

$$\frac{2}{5}x^4 \cdot \frac{1}{x} \cdot \frac{-5}{3} = A$$

$$\frac{2}{5} \cdot \frac{(-5)}{3} \cdot \frac{x^4}{x^1} =$$

$$-\frac{2}{3} \cdot x^3$$

$$x^4 - 3x^3 + 0x^2 + x - 5$$

$$\begin{array}{r} - (x^4 \quad 0x^3 \quad -3x^2) \\ \hline -3x^3 + 3x^2 + x - 5 \end{array}$$

$$x^8 + 0x^7 + 0x^6 + 0x^5 - x^4$$