

TE du 20

- ① Vecteurs
- ② Algèbre (groupements)

Div. end.

Horner

Factorisation

Fractions de polynômes

2.4.2

$$A^2 - B^2 = (A+B)(A-B)$$

factoriser

$$2) \frac{2+7}{2-1} \cdot \frac{2^2-1}{2e+14} = \frac{\cancel{(2+7)} \cdot (2+7) \cdot \cancel{(2-1)}}{\cancel{(2-1)} \cdot 2 \cdot \cancel{(2+7)}} = \frac{2+7}{2}$$

$$\frac{A}{B} + \frac{C}{D} = \frac{AD+BC}{BD}$$

$$\frac{\cancel{A} \cdot B}{C \cdot \cancel{B}} = \frac{A}{C}$$

$$\frac{A}{B} \cdot \frac{C}{D} = \frac{AC}{BD}$$

$$\frac{A}{B} \div \frac{C}{D} = \frac{A}{B} \cdot \frac{D}{C} = \frac{AD}{BC}$$

$$\frac{1}{x+1} + \frac{1}{x-1} =$$

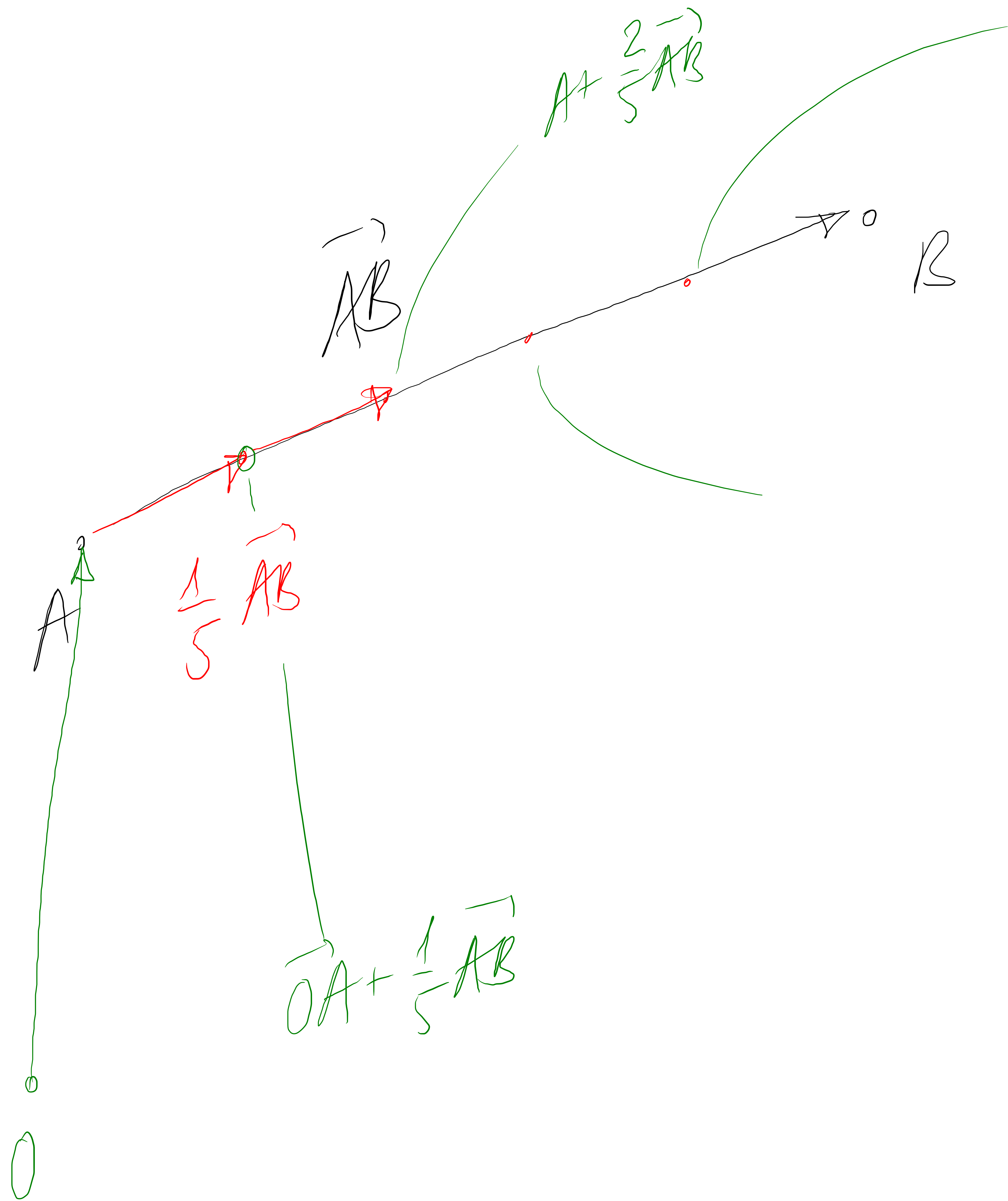
$$\frac{(x-1) \cdot 1 + (x+1) \cdot 1}{(x+1)(x-1)}$$

Reduziere

$$= \frac{x-1+x+1}{(x+1)(x-1)}$$

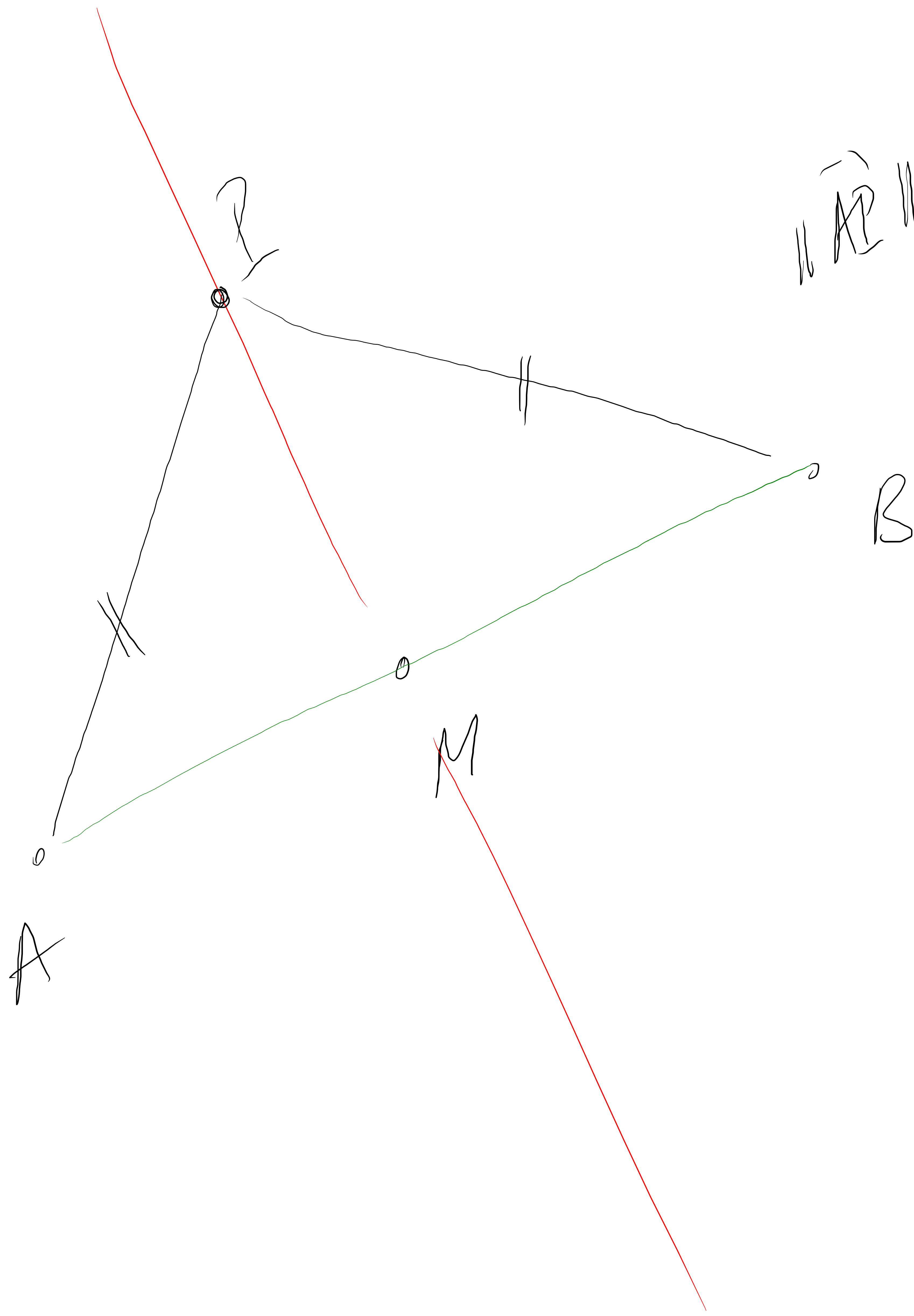
$$= \frac{2x}{(x+1)(x-1)}$$

$$\frac{A}{B} + \frac{C}{D} = \frac{AD+BC}{BD}$$





$$\begin{aligned}
 \boxed{A + k \cdot \vec{AB}} &= \boxed{C + m \cdot \vec{CD}} \\
 \begin{pmatrix} -2 \\ 14 \end{pmatrix} + k \begin{pmatrix} 8 \\ -16 \end{pmatrix} &= \begin{pmatrix} -2 + 8k \\ 14 - 16k \end{pmatrix}
 \end{aligned}$$



$$\|\vec{AP}\| = \|\vec{BP}\|$$

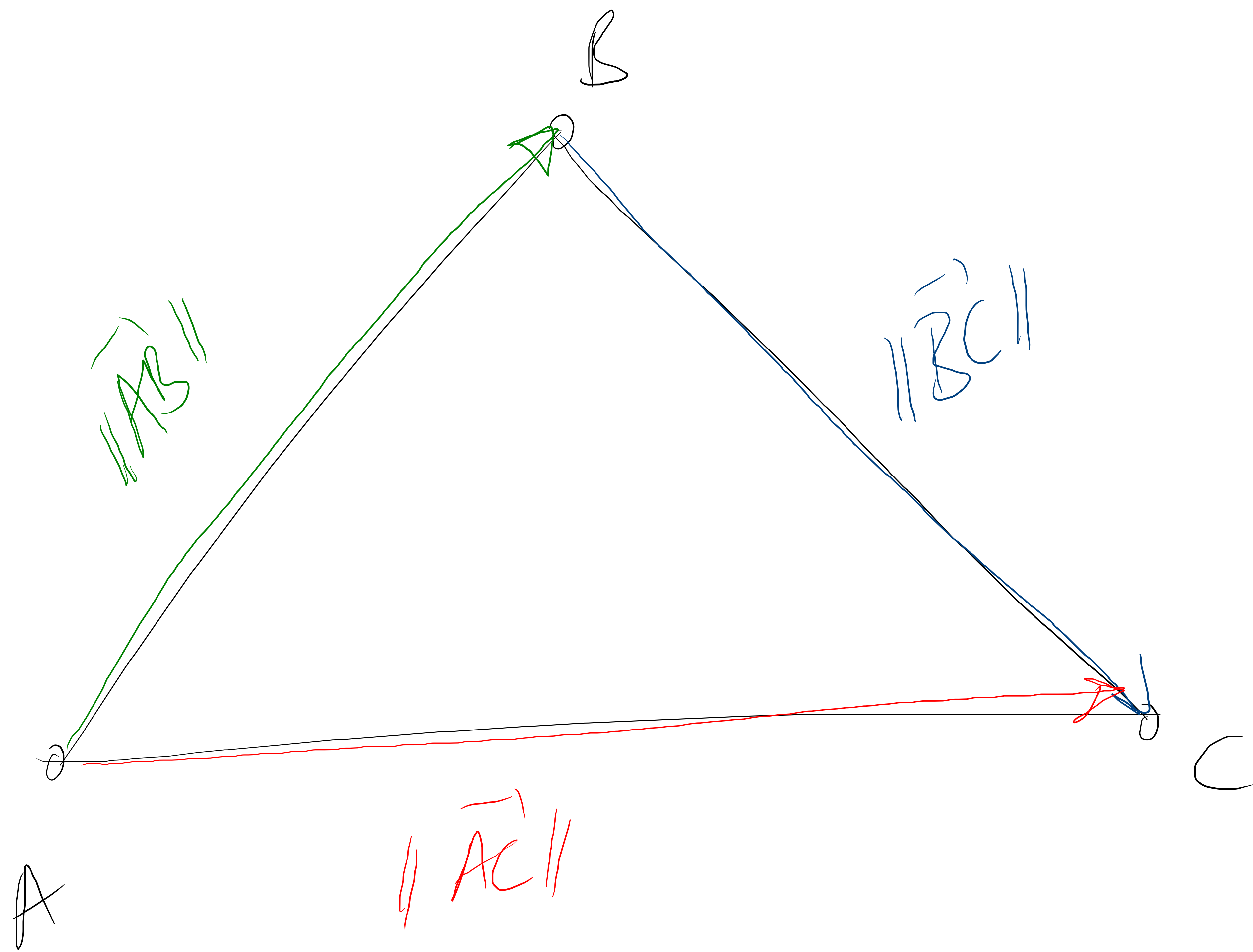
2.2.6

$$i) \quad 1 \cdot (1+x) + x^2(1+x) + x^4(1+x) = (1+x)(1+x^2+x^4)$$

$$x^4 + x^2 + 1$$

$$= x^4 + 2x^2 + 1 - x^2$$

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



perim: $\|\vec{AB}\| + \|\vec{BC}\| + \|\vec{AC}\|$

$$6x^2 - 5x - 6 =$$

$$\Delta = 25 + 4 \cdot 36 = 169$$

$$6(x - x_1)(x - x_2) =$$

$$6\left(x - \frac{3}{2}\right)\left(x + \frac{2}{3}\right)$$

$$x_1 = \frac{5 + 13}{12} = \frac{18}{12} = \frac{3}{2}$$

$$x_2 = \frac{5 - 13}{12} = -\frac{8}{12} = -\frac{2}{3}$$