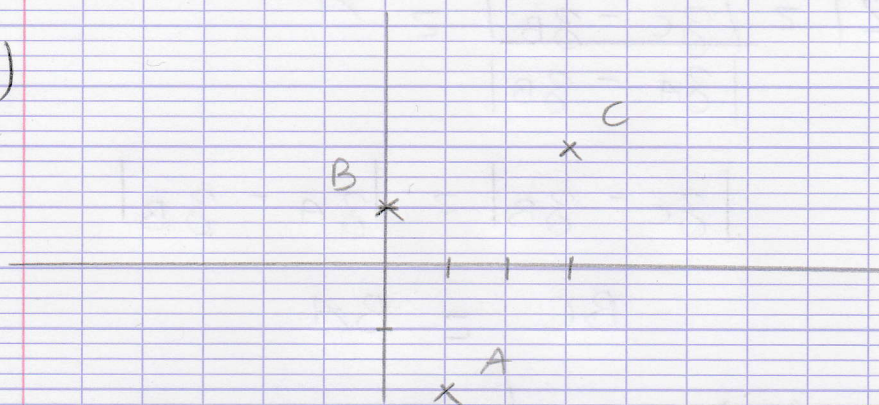


Exercice 1:

1)



Forme algébrique:

$$Z = \frac{z_C - z_B}{z_A - z_B} = \frac{3 + 2i - i}{1 - 2i - i}$$

$$= \frac{3 + i}{1 - 3i}$$

$$= \frac{(3 + i)(1 + 3i)}{1^2 + 3^2}$$

$$= \frac{3 + 9i + i + 3i^2}{10}$$

$$= \frac{10i}{10}$$

$$= i$$

Forme exponentielle

$$|Z| = |i| = 1 \text{ et } \arg(Z) = \arg(i) = \frac{\pi}{2}$$

$$\text{donc } Z = e^{i\frac{\pi}{2}}$$