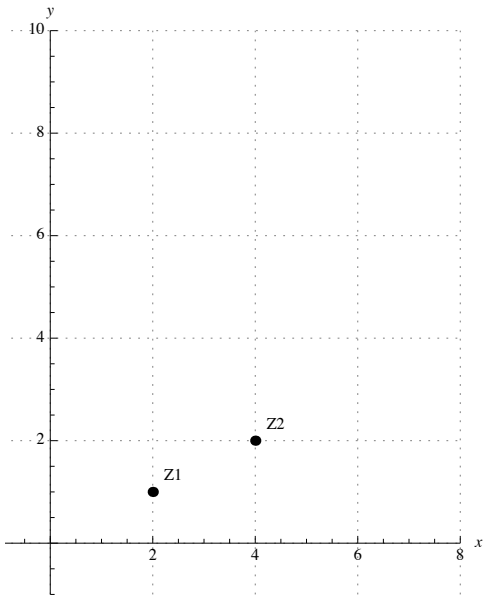
Exercises

1) Assuming the composants of the complex numbers Z_1 and Z_2 as shown on the Argan's planeare integers, show in the same plane the complex numbers:

$$Z_s = Z_1 + Z_2$$

$$Z_p = \mathrm{Z}_1 \cdot \mathrm{Z}_2$$



2) Find the mudulus of Z_1, Z_2 and Z_p.

What relation between these moduli

do you notice?

3) Find the arguments of Z_1, Z_2 and Z_p.

What relation between these arguments

do you notice?

4) Can you prove these statements for any $Z_1\ Z_2 \in \mathbb{C}$?