Exercise 1 Calc. : ✗

Déterminer les solutions complexes de l'équation $z^2 = 3\mathrm{i}$. **Donner** les réponses sous la forme $z = re^{i\theta}$ où $\theta \in]-\pi; +\pi]$.	5 marks

Exercise 2 Calc. : ✗

Find a complex number z that is a cube root of $-8\mathrm{i}$ and a fourth root of $-8 - 8\mathrm{i}\sqrt{3}$.	5 marks

Exercise 3 Calc. : ✗

In the complex plane, show that the set of points M with affix z checking equality: $$\|z - 1 - 3\mathrm{i}\| = \|z + 2 - 3\mathrm{i}\|$$ is a straight line for which we give an equation.	5 marks