Argand Diagram

Starter

1. **(Review of last lesson)** Express in the form $a + b\mathrm{i}$ where a and b are real:

(a) $\dfrac{5+\mathrm{i}}{\mathrm{i}-3}$ (b) $\dfrac{1}{1+2\mathrm{i}} + \dfrac{1}{1-2\mathrm{i}}$

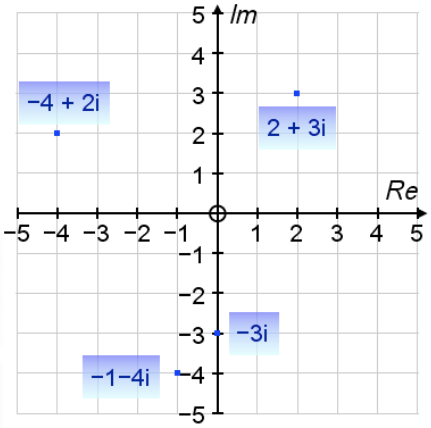
2. **(Review of last lesson)**

Given that $z = -1 + 3\mathrm{i}$, express $z + \dfrac{2}{z}$ in the form $a + b\mathrm{i}$ where a and b are real.

Notes

Complex numbers are represented in 2-D space using an Argand diagram. The horizontal axis is for the real part and the vertical axis is for the complex part.

Adding complex numbers on the Argand diagram is the same as adding vectors (see p120).



Video: Argand diagram

Solutions to Starter and E.g.s

Exercise

p121 4C Qu 1i, 2i, 3i (10 minutes)