**Modulus and argument**

$4+3i$ is plotted on an Argand diagram.

1. What is its distance from the origin?
2. What is its anti-clockwise angle from the positive real axis? (in radians)

$$Re[z]$$

$$Im[z]$$

4

3

$$θ$$

a)

b)

These are respectively known as the modulus $|z|$ and argument $arg⁡(z)$ of a complex number.

Examples

Determine the modulus and argument of:

1. $5+12i$
2. $-1+i$
3. $-2i$
4. $-1-3i$



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