D1.1.1: Complex numbers

L1.1.3

properties of complex numbers

Remark

$\mathbb{C}$ is a field.

D1.1.5 and D1.1.7

polar and exp forms

L1.1.6

de moivre

L1.1.9

conjugate properties

L1.1.10 – 11: Triangle inequalities

D1.1.12: Argument of z

P1.1.14

properties of arg z

Remark

set addition

D1.2.1: Open and closed ϵ-discs

include punctured discs

D1.2.2: Open sets

neighbourhood of point

L1.2.3

punctured disc is open?

D1.2.4: Limit points

also include closure

L1.2.6

D1.2.7: Bounded sets

0.0.1 Remark

include bounded sequence (D1.2.14)

D1.2.8: ϵ-N convergence

L1.2.9

L1.2.10

D1.2.11: Cauchy sequences

L1.2.12

seq conv iff cauchy

L1.2.15: Bolzano-Weierstrass

Remark

define a complex valued function

D1.3.1: Bounded functions

D1.3.2: ϵ-δ convergence

L1.3.3 ?

L1.3.4

results on function limits

L1.3.5

limit algebra

D1.3.6: ϵ-δ continuity