

Bevislista, Analytiska funktioner, MMG700

Minst två av teoriuppgifterna på tentan kommer från denna lista.

- The Cauchy-Riemann equations, Lecture notes: Theorem 3.5; Priestley: Theorem 5.3
- Cauchy's theorem for simple domains, e.g., a triangle, Lecture notes: Theorem 3.7; Priestley: Theorem 11.2 (State which definition of holomorphicity you use!)
- Cauchy's formula, Lecture notes: Theorem 3.9; Priestley: Theorem 13.1
- Taylor's formula, Lecture notes: Theorem 4.7; Priestley: Theorem 14.4
- Liouville's theorem, Lecture notes: Theorem 6.1; Priestley: Theorem 13.3
- Conformal mapping, Lecture notes: Theorem 7.2; Priestley: Theorem 8.2
- Morera's theorem, Lecture notes: Theorem 8.1; Priestley: Theorem 13.8
- Identity theorem, Lecture notes: Theorem 9.7; Priestley: Theorem 15.7
- Argument principle, Lecture notes: 9.10; Priestley: Theorem 15.13
- Rouché's theorem, Lecture notes: 9.11; Priestley: Theorem 15.14
- Maximum principle, Lecture notes: Proposition 11.1; Priestley: Theorem 16.1
- Open mapping theorem, Lecture notes: Theorem 11.4; Priestley: Theorem 16.6 (including the proof of 16.4(3))
- Laurent's theorem, Lecture notes: Theorem 12.1; Priestley: Theorem 17.3
- Cauchy's residue theorem, Lecture notes: Theorem 12.6; Priestley: Theorem 18.3