



The University of Melbourne–Department of Mathematics and Statistics  
School Mathematics Competition, 2013

**JUNIOR DIVISION**

*Time allowed: Two hours*

*These questions are designed to test your ability to analyse a problem and to express yourself clearly and accurately. The following suggestions are made for your guidance:*

- (1) *Considerable weight will be attached by the examiners to the method of presentation of a solution. Candidates should state as clearly as they can the reasoning by which they arrived at their results. In addition, more credit will be given for an elegant than for a clumsy solution.*
- (2) *The **six** questions are not of equal length or difficulty. Generally, the later questions are more difficult than the earlier questions.*
- (3) *It may be necessary to spend considerable time on a problem before any real progress is made.*
- (4) *You may need to do considerable rough work but you should then write out your final solution neatly, stating your arguments carefully.*
- (5) *Credit will be given for partial solutions; however a good answer to one question will normally gain you more credit than sketchy attempts at several questions.*

*Textbooks, electronic calculators and computers are **NOT** allowed. Otherwise normal examination conditions apply.*

