

Assessment Notification



<i>Course</i>	Year 11 Extension 1 Mathematics
<i>Task</i>	Task 2 – In class test
<i>Date and time</i>	Wednesday 21 st June, Week 9, Term 2
<i>Time allowed</i>	65 minutes (3 minutes reading time)
<i>Weighting</i>	30%
<i>Nature of task</i>	Written examination style task, NESA approved calculators allowed, NESA reference sheet will be provided.
	Section A - 5 multiple choice questions Section B - extended response questions
<i>Topics and outcomes</i>	Permutations and Combinations Mathematical Induction Angle between two lines and division of an interval <i>Outcomes – PE2, PE3, PE6, HE2, HE7</i>
<i>Course text</i>	New Senior Mathematics Extension 1 for years 11 & 12; J.B. Fitzpatrick; Pearson Australia

Topics content and text references

Permutations and Combinations (Chapter 3)

Students can be asked to:

- Identify whether a situation involves a permutation or a combination
- Use the fundamental counting principle to find the number of arrangements
- Solve probability problems involving permutations and combinations
- Solve problems involving arrangements about a circle or ring
- Solve equations or prove relationships using algebraic representations of factorial notation and the range of notations for permutations and combinations

Mathematical Induction (Chapter 7)

Students can be asked to:

- Apply the method of mathematical induction to series, divisibility and inequality proofs
- Prove relationships or simplify algebraic expressions typically found in induction proofs

Angle between two lines and division of an interval (Chapter 5.2 and 5.3)

Students can be asked to:

- Use the angle between two lines formula
- Use the division of an interval in a given ratio formula, applied to internal and external division

Preparation

- Write summary notes of the topics listed above
- Study the outcomes listed above using the text references and other resources provided
- Bring your calculator and writing equipment to the assessment