

Assessment Notification



<i>Course</i>	Year 8 Mathematics
<i>Task</i>	Task 2 – Half Yearly Examination
<i>Date and time</i>	As per exam timetable, Week 5, Term 2
<i>Time allowed</i>	60 minutes (3 minutes reading time)
<i>Weighting</i>	20%
<i>Nature of task</i>	Written examination style task, calculators allowed. Each student is permitted to bring a sheet of A4 paper with one side of handwritten notes into the examination.

<i>Topics and outcomes</i>	Algebraic Techniques (MA3-8NA; MA4-8NA) Reasoning in Geometry and Angle Relationships (MA3-16MG; MA4-17MG, 18MG) Data Collection and Representation (MA3-18SP; MA4-19SP, 20SP) Rates and Ratios (MA4-7NA)
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<i>Course text</i>	Signpost Mathematics 8, Pearson
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Topics content and text references

Algebraic Techniques (Chapter 5)

Students can be asked to:

- Use pronumerals to represent given practical situations
- Add and subtract algebraic terms
- Multiply and divide algebraic expressions
- Substitute into algebraic expressions and evaluate, including practical scenarios
- Expand brackets and simplify resulting expressions
- Find the highest common factor (HCF) of a given number/algebraic expression
- Factorise algebraic expressions using the HCF

Reasoning in Geometry (Chapter 15)

Students can be asked to:

- Measure and construct angles
- Classify angles as acute, right-angled, obtuse and reflex
- Name angles using the labels on a diagram
- Identify and use the properties of straight angles, vertically opposite angles and angles at a point
- Identify and use the properties of the angle of sum of a triangle and quadrilateral
- Identify and use the properties of isosceles and equilateral triangles
- Recognise when two lines are cut by a third line, called a transversal, 3 types of angles are formed – corresponding, alternate and co-interior angles
- Identify and use the properties of corresponding, alternate and co-interior angles when the pair of lines are parallel to find the size of an angle
- Provide geometric reasoning to determine the size of an angle

(continued overleaf)

Data Collection and Representation (Chapter 1:16, 7:02, 7:05)

Students can be asked to:

- Represent information in a column graph and a line graph
- Determine the range, mode, mean and median from a group of scores
- Represent data in a frequency distribution table, dot plots, stem and leaf plots, frequency histograms and polygons
- Determine the range and mode from a frequency distribution table
- Complete the fx column in a frequency distribution table and determine the mean from a table
- Complete the cumulative frequency column in a table of data
- Identify outliers, gaps and clusters in sets of data
- Determine the effect of outliers on the mean and median of a set of scores

Rates and Ratios (Chapter 10:01 to 10:06)

Students can be asked to:

- Simplify ratios involving integers
- Simplify ratios involving the same units of length, mass and capacity
- Solve problems using the unitary method
- Divide a quantity in a given ratio
- Interpret a rate.

Preparation

- Review class notes and work and use this to prepare the one side of A4 (handwritten) that you can bring into the assessment.
- Study the outcomes listed above by reviewing the theory and working through relevant questions, seeking assistance where required.
- Bring all your equipment to the examination – calculator, pen, pencil, ruler, protractor, eraser