

Assessment overview

Content domain	Total
Number	4
Algebra	9
Ratio, proportion and rates of change	6
Geometry and measures	7
Probability	2
Statistics	2

Question breakdown

Q	Content domain reference
1	A7 use algebraic methods to solve linear equations in 1 variable (including all forms that require rearrangement)
2	G14 use Pythagoras' Theorem and trigonometric ratios in similar triangles to solve problems involving right-angled triangles
3	A5 understand and use standard mathematical formulae; rearrange formulae to change the subject
4	A4 simplify and manipulate algebraic expressions to maintain equivalence
5	G6 use the standard conventions for labelling the sides and angles of triangle ABC, and know and use the criteria for congruence of triangles
6	R5 divide a given quantity into 2 parts in a given part:part or part:whole ratio; express the division of a quantity into 2 parts as a ratio
7	G11 understand and use the relationship between parallel lines and alternate and corresponding angles
8	N10 define percentage as 'number of parts per hundred', interpret percentages and percentage changes as a fraction or a decimal
9	N14 use approximation through rounding to estimate answers and calculate possible resulting errors expressed using inequality notation $a < x \leq b$
10	A9 recognise, sketch and produce graphs of linear and quadratic functions of 1 variable with appropriate scaling, using equations in x and y and the Cartesian plane
11	S2 construct and interpret appropriate tables, charts, and diagrams, including for categorical data and for ungrouped and grouped numerical data
12	N4 use the 4 operations, including formal written methods, applied to integers, decimals, proper and improper fractions, and mixed numbers
13	G14 use Pythagoras' Theorem and trigonometric ratios in similar triangles to solve problems involving right-angled triangles
14	A5 understand and use standard mathematical formulae; rearrange formulae to change the subject
15	N10 compare 2 quantities using percentages

Question breakdown

Q	Content domain reference
16	R10 use compound units such as speed, unit pricing and density to solve problems
17	R9 solve problems involving direct and inverse proportion, including graphical and algebraic representations
18	S1 describe, interpret and compare observed distributions of a single variable through appropriate measures of central tendency and spread
19	A7 use algebraic methods to solve linear equations in 1 variable (including all forms that require rearrangement)
20	R8 solve problems involving percentage change, including: percentage increase, decrease and original value problems and simple interest in financial mathematics
21	A11 reduce a given linear equation in 2 variables to the standard form $y = mx + c$; calculate and interpret gradients and intercepts of graphs of such linear equations numerically, graphically and algebraically
22	R9 solve problems involving direct and inverse proportion, including graphical and algebraic representations
23	P4 generate theoretical sample spaces for single and combined events with equally likely, mutually exclusive outcomes and use these to calculate theoretical probabilities
24	G13 apply angle facts, triangle congruence, similarity and properties of quadrilaterals to derive results about angles and sides, including Pythagoras' Theorem, and use known results to obtain simple proofs
25	A11 reduce a given linear equation in 2 variables to the standard form $y = mx + c$; calculate and interpret gradients and intercepts of graphs of such linear equations numerically, graphically and algebraically
26	G1 derive and apply formulae to calculate and solve problems involving perimeter, area and volume
27	A13 find approximate solutions to contextual problems from given graphs of a variety of functions, including piece-wise linear, exponential and reciprocal graphs
28	P1 record, describe and analyse the frequency of outcomes of simple probability experiments
29	G14 use Pythagoras' Theorem and trigonometric ratios in similar triangles to solve problems involving right-angled triangles
30	R5 divide a given quantity into 2 parts in a given part:part or part:whole ratio; express the division of a quantity into 2 parts as a ratio