

Assessment overview

Content domain	Total
Number	5
Algebra	8
Ratio, proportion and rates of change	4
Geometry and measures	9
Probability	3
Statistics	1

Question breakdown

Q	Content domain reference
1	G10 apply the properties of angles at a point, angles at a point on a straight line and vertically opposite angles
2	G1 derive and apply formulae to calculate and solve problems involving perimeter, area and volume
3	P4 generate theoretical sample spaces for single and combined events with equally likely, mutually exclusive outcomes and use these to calculate theoretical probabilities
4	R8 solve problems involving percentage change, including: percentage increase, decrease and original value problems and simple interest in financial mathematics
5	R9 solve problems involving direct and inverse proportion, including graphical and algebraic representations
6	G14 use Pythagoras' Theorem and trigonometric ratios in similar triangles to solve problems involving right-angled triangles
7	N10 define percentage as 'number of parts per hundred', interpret percentages and percentage changes as a fraction or a decimal
8	G14 use Pythagoras' Theorem and trigonometric ratios in similar triangles to solve problems involving right-angled triangles
9	N14 use approximation through rounding to estimate answers and calculate possible resulting errors expressed using inequality notation $a < x \leq b$
10	S1 describe, interpret and compare observed distributions of a single variable through appropriate measures of central tendency and spread
11	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
12	A7 use algebraic methods to solve linear equations in 1 variable (including all forms that require rearrangement)
13	N14 use approximation through rounding to estimate answers and calculate possible resulting errors expressed using inequality notation $a < x \leq b$
14	N4 use the 4 operations, including formal written methods, applied to integers, decimals, proper and improper fractions, and mixed numbers
15	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

Question breakdown

Q	Content domain reference
16	R9 solve problems involving direct and inverse proportion, including graphical and algebraic representations
17	G14 use Pythagoras' Theorem and trigonometric ratios in similar triangles to solve problems involving right-angled triangles
18	P3 enumerate sets and unions/intersections of sets systematically, using tables, grids and Venn diagrams
19	P1 record, describe and analyse the frequency of outcomes of simple probability experiments
20	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
21	N4 use the 4 operations, including formal written methods, applied to integers, decimals, proper and improper fractions, and mixed numbers
22	A4 simplify and manipulate algebraic expressions to maintain equivalence
23	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
24	A5 understand and use standard mathematical formulae; rearrange formulae to change the subject
25	G6 use the standard conventions for labelling the sides and angles of triangle ABC, and know and use the criteria for congruence of triangles
26	A7 use algebraic methods to solve linear equations in 1 variable (including all forms that require rearrangement)
27	G14 use Pythagoras' Theorem and trigonometric ratios in similar triangles to solve problems involving right-angled triangles
28	A4 simplify and manipulate algebraic expressions to maintain equivalence
29	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
30	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