Quest

Spring term assessment content domain coverage

Year 8 Maths (calculator)

Assessment overview

Content domain	Total
Number	7
Algebra	11
Ratio, proportion and rates of change	7
Geometry and measures	6
Statistics	2

Quest

Spring term assessment content domain coverage

Year 8 Maths (calculator)

Question breakdown

Q	Reference	
1	8A8	work with coordinates in all four quadrants
2	8A11	reduce a given linear equation in two variables to the standard form y = mx + c; calculate and interpret gradients and intercepts of graphs of such linear equations numerically, graphically and algebraically
3	8G11	understand and use the relationship between parallel lines and alternate and corresponding angles
4	8S1	describe, interpret and compare observed distributions of a single variable through: appropriate graphical representation involving discrete, continuous and grouped data; and appropriate measures of central tendency (mean, mode, median) and spread (range, consideration of outliers)
5	8S2	construct and interpret appropriate tables, charts, and diagrams, including frequency tables, bar charts, pie charts, and pictograms for categorical data, and vertical line (or bar) charts for ungrouped and grouped numerical data
6	8A4	simplify and manipulate algebraic expressions to maintain equivalence by: collecting like terms; multiplying a single term over a bracket; taking out common factors; expanding products of two or more binomials
7	7R1	change freely between related standard units [for example time, length, area, volume/capacity, mass]
	8N10	define percentage as ‘number of parts per hundred’, interpret percentages and percentage changes as a fraction or a decimal, interpret these multiplicatively, express one quantity as a percentage of another, compare two quantities using percentages, and work with percentages greater than 100%
8	8R5	divide a given quantity into two parts in a given part:part or part:whole ratio; express the division of a quantity into two parts as a ratio
9	8A8	work with coordinates in all four quadrants
	8G13	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
10	8A7	use algebraic methods to solve linear equations in one variable (including all forms that require rearrangement)
11	8A4	simplify and manipulate algebraic expressions to maintain equivalence by: collecting like terms; multiplying a single term over a bracket; taking out common factors; expanding products of two or more binomials
12	8A14	generate terms of a sequence from either a term-to-term or a position-to-term rule
13	8N10	define percentage as ‘number of parts per hundred’, interpret percentages and percentage changes as a fraction or a decimal, interpret these multiplicatively, express one quantity as a percentage of another, compare two quantities using percentages, and work with percentages greater than 100%

Quest

Spring term assessment content domain coverage

Year 8 Maths (calculator)

Q	Reference	
14	8G5	describe, sketch and draw using conventional terms and notations: points, lines, parallel lines, perpendicular lines, right angles, regular polygons, and other polygons that are reflectively and rotationally symmetric
15	8N8	interpret and compare numbers in standard form A x 10^n, 1≤A<10, where n is a positive or negative integer or zero
16	8R5	divide a given quantity into two parts in a given part:part or part:whole ratio; express the division of a quantity into two parts as a ratio
17	8R5	divide a given quantity into two parts in a given part:part or part:whole ratio; express the division of a quantity into two parts as a ratio
18	8R9	solve problems involving direct and inverse proportion, including graphical and algebraic representations
19	8A4	simplify and manipulate algebraic expressions to maintain equivalence by: collecting like terms; multiplying a single term over a bracket; taking out common factors; expanding products of two or more binomials
20	8G8	identify properties of, and describe the results of, translations, rotations and reflections applied to given figures
21	8A4	simplify and manipulate algebraic expressions to maintain equivalence by: collecting like terms; multiplying a single term over a bracket; taking out common factors; expanding products of two or more binomials
22	8G1	derive and apply formulae to calculate and solve problems involving: perimeter and area of triangles, parallelograms, trapezia, volume of cuboids (including cubes) and other prisms (including cylinders)
23	8A3 8A6	understand and use the concepts and vocabulary of expressions, equations, inequalities, terms and factors model situations or procedures by translating them into algebraic expressions or formulae and by using graphs
24	8R1	change freely between related standard units [for example time, length, area, volume/capacity, mass]
25	8N10	define percentage as ‘number of parts per hundred’, interpret percentages and percentage changes as a fraction or a decimal, interpret these multiplicatively, express one quantity as a percentage of another, compare two quantities using percentages, and work with percentages greater than 100%
26	8N4	use the four operations, including formal written methods, applied to integers, decimals, proper and improper fractions, and mixed numbers, all both positive and negative
27	8N10	define percentage as ‘number of parts per hundred’, interpret percentages and percentage changes as a fraction or a decimal, interpret these multiplicatively, express one quantity as a percentage of another, compare two quantities using percentages, and work with percentages greater than 100%
28	8A7	use algebraic methods to solve linear equations in one variable (including all forms that require rearrangement)

Quest

Spring term assessment content domain coverage

Year 8 Maths (calculator)

Q	Reference	
29	7G2	calculate and solve problems involving: perimeters of 2-D shapes (including circles), areas of circles and composite shapes
	8R2	use scale factors, scale diagrams and maps
30	8N8	interpret and compare numbers in standard form A x 10^n, 1≤A<10, where n is a positive or negative integer or zero