

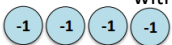


$$\frac{6}{10} + 0.3$$

Mathematics at Dene Academy

Fractional Thinking

- Addition and subtraction with fractions



Directed Number

- Four operations with directed number

Application of Number

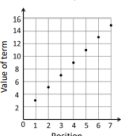
- Solving problems with addition and subtraction
- Multiplication and division
- Fractions and percentages of amounts

Place Value and Proportion

- Place value and ordering integers and decimals
- Fraction, decimal and percentage equivalence

Algebraic Thinking

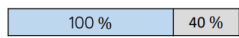
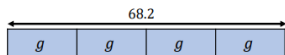
- Sequences
- Understand and use algebraic notation
- Equality and equivalence



Position	1	2	3	4
Term	3	5	7	9

$$2(x + 4)$$

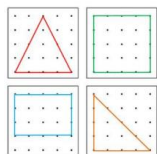
$$2x + 8$$



140%

Lines and Angles

- Constructing, measuring and using geometric notation
- Develop Geometric reasoning



Proportional Reasoning

- Ratio and scale
- Multiplicative change
- Multiplying and dividing fractions

Representations

- Working in the cartesian plane
- Representing Data
- Tables and Probability

Algebraic Techniques

- Brackets, equations and inequalities
- Sequences
- Indices

Developing Number

- Fractions and percentages
- Standard index form
- Number sense

Developing Geometry

- Angles in parallel lines and polygons
- Area of trapezia and circles
- Line symmetry and reflection

Reasoning with Number

- Developing number sense
- Sets and probability
- Prime numbers and proof

Reasoning with Geometry

- Deduction
- Rotation and Translation
- Pythagoras' Theorem

Reasoning with Number

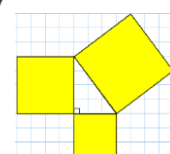
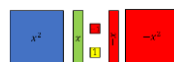
- Numbers
- Using percentages
- Maths and money

Constructing in 2 and 3 Dimensions

- Three dimensional shapes
- Constructions and congruency

Reasoning with Algebra

- Straight line graphs
- Forming and solving equations
- Testing conjectures



Similarity

- Congruence, similarity and enlargement
- Trigonometry

Developing Algebra

- Representing solutions of equations and inequalities
- Simultaneous equations

Geometry

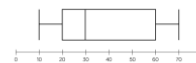
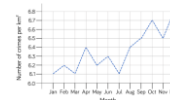
- Angles and bearings
- Working with circles
- Vectors

Proportions and Proportional Change

- Ratio and fractions
- Percentages and interest
- Probability

Reasoning with Data

- The data handling cycle
- Measures of location



Reasoning with Proportion

- Enlargement and similarity
- Solving ratio and proportion problems
- Rates

Representations

- Probability
- Algebraic representation
- Introduction to trigonometry

Ratio

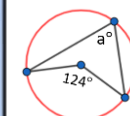
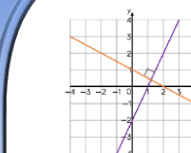
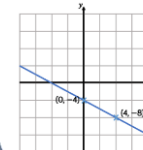
- FDP
- Proportion
- Graphs

Algebra

- Expanding and factorising
- Simplify and substitution
- Equations and Inequalities

Number

- Types of number
- Laws of indices
- Standard form
- Error intervals and bounds



Geometry 1

- Area, surface area and volume
- Angles
- Pythagoras and Trigonometry

Representations

- Probability
- Sequences
- Data & statistics

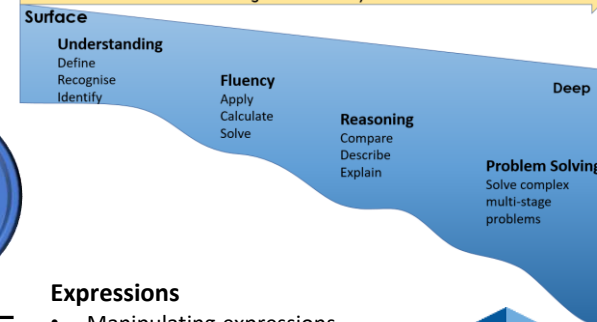
Geometry 2

- Vectors
- Transformations
- Proof
- Constructions

Revision

Further Maths A Level Maths Core Maths

Working towards mastery



Expressions

- Manipulating expressions

Using Number

- Non-calculator methods
- Types of number sequences
- Indices and roots

Delving into Data

- Collecting, representing and interpreting data