My mathematical journey

What do I need to remember from before?

Place value (NP1)

Vectors on a number line (NP1)

Adding and subtracting whole numbers with pen and paper and mentally (KS2)

Using rounding to check answers to calculations (KS2)

What will I learn about in this unit?

Addition and subtraction with integers and decimals

Commutativity & mental methods with integers and decimals

Number bonds, complements, working with decimals

Vectors, inverse operations, equality and zero pairs

Perimeter

Angle facts

Mean and range

Where does this lead?

Order of operations (NP5)

Directed numbers (NP6)

Simplifying expressions (A1)

Adding & subtracting fractions (NP7)

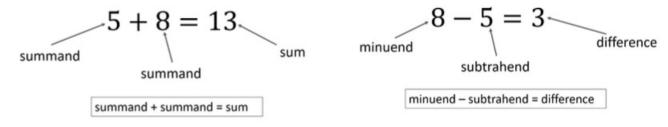
Solving linear equations (A2)

Adding & subtracting numbers in standard form (NP12)

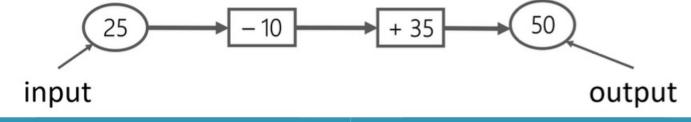
Adding and subtracting surds (NP15)

Key words: what I need to say and write accurately

| Word | Explanation |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| commutative | if you can change the order of the numbers and not change the answer, then the operation is commutative. e.g. $5 + 7 = 12$ and $7 + 5 = 12$, so addition is commutative e.g. $20 - 6 = 14$ and $6 - 20 = -14$, so subtraction is not commutative |
| complement of a decimal | the number you add to get to 1, e.g. the complement of 0.7 is 0.3 |
| inverse operations | operations that 'undo' each other, such as addition and subtraction |
| function | a combination of one or more operations |
| zero pair | a pair of numbers whose sum is 0, e.g. 3 and −3 |
| additive inverse | the numbers in a zero pair are called additive inverses of each other |
| perimeter | total length of all the sides of a 2D shape |
| rectilinear shape | a shape with only right angles and straight lines |



A function machine:



NP2 2