# Key Knowledge/Prior Learning KS2/3 and Retrieval and Suggested Starters

- Simplifying algebraic expressions.
- Expanding Brackets
- Substitution

#### **Retrieval and Suggested Starters**

- Practicing the fluency of the above skills.
- Interleaving & problem-solving questions involving the above topics.

### KS4 National Curriculum – what students will be practicing

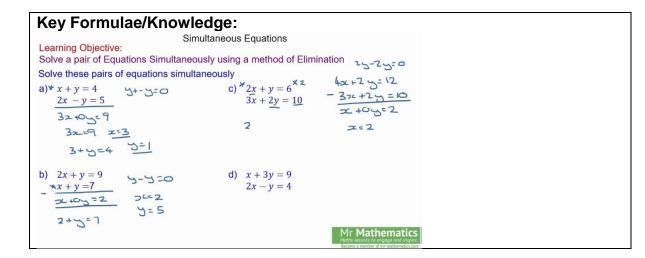
- Solve two linear simultaneous equations in two variables by elimination.
- Find approximate solutions using a graph.
- Form simultaneous equations & interpret the solution.

## **Specific Ambitious Knowledge**

- Including equations that need rearranging.
- Interleaving of topics to solve problems.

### **Key Vocabulary/Literacy Opportunities**

- Simultaneous
- Equations
- Elimination
- Approximate
- Substitution



Use the elimination method to solve the given simultaneous equations

$$5x + y = 20 \text{ (x5)} \quad \text{substitute } x = 3$$

$$4x + 5y = 37 \text{ into } \\
5x + y = 20$$

$$5x + y = 20$$

$$5(3) + y = 20$$

$$15 + y = 20$$

$$15 + y = 20$$

$$15 + y = 37$$

$$21x = 63$$

$$21x = 63$$

$$21x = 37$$

### **Cross Curricular Links**

- Links to other areas of the Maths curriculum.
- Problem-solving skills linked to other subjects.

# Student' Thinking:

- How do we make one variable equal in each equation?
- Does it matter which variable we make equal?
- How do we decide whether to add or subtract?

### Projects/Enrichment/Investigations

Pick's Theorem
Training Schedule

• Shared documents/Maths/Projects/Problem-solving card sorts.