

Keywords: Autumn 2

Year 7 Maths Class 9-7, 9-6

Topics: Expressions, Fractions and Sequences and Graphs.

We are going to learn what the algebra is and how to find unknown numbers. Also, we will use four operations to calculate with fractions. Lastly, we will explore amazing world of different patterns and sequences.

| Keyword | Definition |
|--------------------------------|---|
| Algebraic notation | In algebra we use different notations to mark the specific calculations. |
| Substitution | Swapping unknown letters with exact values. |
| Collecting like terms | Combine the like terms by adding or subtracting. |
| Order of operation | BIDMAS (Brackets, Indices, division, Multiplication, Addition and subtractions) |
| Expanding brackets | In order to expand single brackets: <ol style="list-style-type: none"> 1) Multiply the term outside of the bracket by the first term inside the bracket. 2) Multiply the term outside the bracket by the second term inside the bracket. |
| Factorising expressions | In order to factorise an algebraic expression into a single bracket: <ol style="list-style-type: none"> 1) Find the highest common factor of each of the terms in the expression. 2) Write the highest common factor (HCF) at the front of a single bracket 3) Fill in each term in the bracket by multiplying out. |
| Linear sequence | A number pattern which increases (or decreases) by the same amount each time is called a linear sequence. The amount it increases or decreases by is known as the common difference. |
| “n”th term rule | To find the nth term, first calculate the common difference, d. Next multiply each term number of the sequence (n = 1, 2, 3, ...) by the common difference. Then add or subtract a number from the new sequence to achieve a copy of the sequence given in the question. |