

**Addition of Polynomials**

Top of Form

Addition of polynomials can be solved in two methods.

(ii) By arranging expressions in lines so that the like terms with their signs are one below the other i.e. like terms are in same vertical column and then add the different groups of like terms.

**For example:**

**1. Add: 7a + 5b, 6a – 6b + 3c and -5a + 7b + 4c**

Therefore, adding 7a + 5b, 6a – 6b + 3c and -5a + 7b + 4c is 8a + 6b + 7c.

 
First we will arrange the three expressions one below the other, placing the like terms in the same column. Now the like terms are added by adding their coefficients with their signs.

**2. Add: 3x3 – 5x2 + 8x + 10, 15x3 – 6x – 23, 9x2 – 4x + 15 and -8x3+ 2x2 – 7x.**

Therefore, adding 3x3 – 5x2 + 8x + 10, 15x3 – 6x – 23, 9x2 – 4x + 15 and -8x3 + 2x2 – 7x is 10x3 + 6x2 – 9x + 2.

First we will arrange the like terms in the vertical column and then the like terms are added by adding their coefficients with their signs.

 