1. The following data shows the number of students offered different subjects in school. Represent the data given below by a pie chart.

SUBJECTS	NUMBER OF STUDENTS
ENGLISH	45
MATHEMATICS	60
PHYSICS	20
CHEMISTRY	30
ECONIMICS	25
	TOTAL =

2. Simplify:-   i) $(x+y)(2x+y) + (x+2y)(x-y)$ ii) $(a+b)(2a-3b+c) – (2a-3b)c$.

3. Subtract $3pq(p-q)$ from $2pq(p+q)$.

4. Add:- $4y(3y^2 + 5y – 7)$ and $2 (y^3 – 4y^2 + 5)$

5. Subtract: $4p^2q – 3pq + 5pq^2 - 8p + 7q – 10$ from $18 – 3p – 11q + 5pq -2pq^2 + 5p^2q$.

6. Following table is showing the distribution of marks of 50 students:

CLASSES	NO. OF STUDENTS
0 - 10	5
10 - 20	8
20 - 30	7
30 - 40	2
40 - 50	4
50 - 60	3
60 - 70	4

Answer the following questions:

i) What is the lower limit of second class?

ii) What is the class mark of 5th class?

iii) What is the class size or class width of the above distribution?

iv) What is the upper limit of 4th class?

v) How many students scored above 50 marks?

7. Multiply (5a+ 4b) by $3a^2b^2$ and verify your answer taking a = 1 and b = -2.

8. Solve: $\frac{2x}{3}$ μ $\frac{x-8}{6}$ + = $\frac{2(2x+19)}{9}$

9. Using the identity (x + a)(x + b) = x^2 + (a + b)x + ab, find the value of:

   i) (4x + 5)(4x - 1)   ii) 95 X 103

10. Find the following squares by using the identities.

   i) (2.5a μ 1.5b)² ii) ($6x^2$ μ 5y)²

11. Show that (9x − 5y)² + 180xy = (9x + 5q)²