1. $2x^2 + 3x + 1$
2. $-x^2 + 5x - 6$
3. $4x^2 - 8x + 2$
4. $-3x^2 + 6x - 9$
5. $x^2 + 2x + 1$
6. $-2x^2 - 4x - 1$
7. $3x^2 + 7x + 2$
8. $-4x^2 - 2x + 5$
9. $x^2 - 5x - 6$
10. $2x^2 + 4x + 1$
11. $-x^2 + 3x - 2$
12. $4x^2 - 6x + 2$
13. $-3x^2 + 5x - 4$
14. $x^2 + 4x + 4$
15. $-2x^2 - 3x - 1$
16. $3x^2 + 6x + 1$
17. $-4x^2 + 2x - 7$
18. $x^2 + 5x + 6$
19. $2x^2 - x - 1$
20. $-x^2 - 2x + 3$
21. $4x^2 + 8x + 2$
22. $-3x^2 - 7x - 2$

23. $x^2 - 4x + 4$
24. $2x^2 - 6x + 3$
25. $-x^2 + 2x - 1$
26. $3x^2 - 5x + 4$
27. $-4x^2 + x - 5$
28. $x^2 + 3x + 2$
29. $-2x^2 + 4x - 1$
30. $4x^2 + 2x + 6$
31. $-3x^2 - 6x - 1$
32. $x^2 + 6x + 9$
33. $2x^2 - 3x - 1$
34. $-x^2 - 5x + 2$
35. $3x^2 + 7x + 2$
36. $-4x^2 + 8x - 2$
37. $x^2 + x - 6$
38. $-2x^2 - 4x + 1$
39. $4x^2 + 6x + 2$
40. $-3x^2 + 5x + 4$
41. $x^2 + 2x + 1$
42. $-x^2 - 3x - 2$
43. $2x^2 + 4x + 1$
44. $-4x^2 - 2x - 5$
45. $3x^2 - 6x - 1$
46. $-2x^2 + 3x - 2$
47. $x^2 - 4x + 6$
48. $4x^2 - 8x + 2$
49. $-3x^2 - 7x + 2$
50. $x^2 + 5x - 6$

Q51. Tom has a rectangular garden with an area represented by $x^2 + 6x + 9$. If the length of the gargen is $x + 3$, what is the width of the garden?

Q52. A company profit's is represented by expression $2y^2 - 18y + 36$, if the profit is modelled by $2(y - 3)^2$, find the number of units sold (y) when the profit is maximized.

Q53. Find the zeroes of the following polynomials by factorisation method and verify the relations between the zeroes and the coefficients of the polynomials:

(i) $4x^2 - 3x - 1$

(ii) $3x^2 + 4x - 4$

(iii) $5t^2 + 12t + 7$

(iv) $2x^2 + 7/2 \, x + 3$

(v) $7y^2 - 11/3 \, y - 2/3$

Q54. Find the zeroes of the quadratic polynomial $6x^2 - 7x - 3$ and verify the relationship between the zeroes and the coefficients.

Q55. Find the zeroes of the polynomialand the zeroes of the polynomial $x^2 + 1/6 \, x - 2$ and verify the relationship between the zeroes and the coefficients.

Q56. Find the zeroes of the quadratic polynomial $x^2 + 5x + 6$ and verify the relationship between the zeroes and the coefficients.

---------- **END** ----------