

$$\text{Q1. } \begin{aligned} &x^2 + 2x - 15 \\ &(x - 3)(x + 5) \end{aligned}$$

$$\text{Q2. } \begin{aligned} &(x+4)(2x^2+3x-1) \\ &2x^3 + 3x^2 - x + 8x^2 + 12x - 4 \\ &2x^3 + 11x^2 + 11x - 4 \end{aligned}$$

$$\text{Q3. } \begin{aligned} &(x-3)(x^2+4x-1) \\ &x^3 + 4x^2 - x - 3x^2 - 12x + 3 \\ &x^3 + x^2 - 13x + 3 \end{aligned}$$

$$\text{Q4. (i) } \begin{aligned} &3y^2 - 6y \\ &3y(y-2) \end{aligned}$$

$$\text{(ii) } \begin{aligned} &y^2 + y - 6 \\ &(y-2)(y+3) \end{aligned}$$

$$\text{Q5. } \begin{aligned} &(2a-b)(3a+2b) \\ &6a^2 + 4ab - 3ab - 2b^2 \\ &6a^2 + ab - 2b^2 \end{aligned}$$

$$\text{Q6. } \begin{aligned} &7 + 6x - x^2 \\ &(7-x)(1+x) \end{aligned}$$

$$\text{Q7. } \begin{aligned} &5x + (x-4)(3x+1) \\ &5x + 3x^2 + x - 12x - 4 \\ &3x^2 - 6x - 4 \end{aligned}$$

$$\text{Q8. } \begin{aligned} &3x^2 - 7x + 2 \\ &(3x+1)(x-2) \end{aligned}$$

$$\text{Q9. } \begin{aligned} &(4x+2)(x-5) + 3x \\ &4x^2 - 20x + 2x - 10 + 3x \\ &4x^2 - 15x - 10 \end{aligned}$$

$$\text{Q10. } \begin{aligned} &2p^2 - 5p - 12 \\ &(2p+3)(p-4) \end{aligned}$$

$$\text{Q11. } \begin{aligned} &(2y-3)(y^2+4y-1) \\ &2y^3 + 8y^2 - 2y - 3y^2 - 12y + 3 \\ &2y^3 + 5y^2 - 14y + 3 \end{aligned}$$

$$\text{Q12. } \begin{aligned} &4p^2 - 49 \\ &(2p+7)(2p-7) \end{aligned}$$

$$\text{Q13. } \begin{aligned} &(x+3)(x^2+4x-12) \\ &x^3 + 4x^2 - 12x + 3x^2 + 12x - 36 \\ &x^3 + 7x^2 - 36 \end{aligned}$$

$$\text{Q14. } \begin{aligned} &2x^2 - 18 \\ &2(x^2 - 9) \\ &2(x+3)(x-3) \end{aligned}$$

$$\text{Q15. } \begin{aligned} &(3x+2)(x-5) + 8x \\ &3x^2 - 15x + 2x - 10 + 8x \\ &3x^2 - 5x - 10 \end{aligned}$$

$$\text{Q16. } \begin{aligned} &x^2 - y^2 \\ &(x+y)(x-y) \end{aligned}$$

$$\text{Q17. } \begin{aligned} &9 \cdot 3^2 - 0.7^2 \\ &(9 \cdot 3 + 0.7)(9 \cdot 3 - 0.7) \\ &(10)(8.6) = \underline{86} \end{aligned}$$