

FACTORISING EXERCISES

EXERCISE 1

1. Factorise: $a^2 - 9b^2$
2. Factorise: $c^3 - 25c$
3. Factorise: $d^2 - 14d + 49$
4. Factorise: $4e^2 + 12ef + 9f^2$
5. Factorise: $18g^2 - 12g + 2$
6. Factorise: $h^4 - 18h^2 + 81$
7. Factorise: $j^3 - 125$
8. Factorise: $27k^3 + 8$
9. Factorise: $64 - l^6$
10. Factorise: $2 - 20m^2 + 50m^4$
11. Factorise: $(n + 2)^2 - 6(n + 2) + 9$
12. Factorise: $4 - 4(1 - 3p) + (1 - 3p)^2$
13. Factorise: $(3q - 2r)^2 - (2r - s)^2$
14. Factorise: $(t + 3u)^2 - (2u + v)^2$

EXERCISE 2

1. Factorise: $a^2 - 5a + 6$
2. Factorise: $b^2 + 10b + 9$
3. Factorise: $c^2 + 3c - 10$
4. Factorise: $d^2 - 4d - 12$
5. Factorise: $1 + 2e - 3e^2$
6. Factorise: $1 - 6f + 5f^2$

EXERCISE 3

1. Factorise: $ac + bc - ad - bd$
2. Factorise: $pr + 3ps + 2qr + 6qs$
3. Factorise: $x^2 + xy - 2xz - 2yz$
4. Factorise: $2ef - eg - 4fg + 2g^2$
5. Factorise: $3ab + 4cd - cb - 12ad$
6. Factorise: $10mq - pr - 2pq + 5mr$
7. Factorise: $2st - 3t - 4s + 6$
8. Factorise: $8vw - 12w + 6v - 9$
9. Factorise: $15x^2 - 10xy - 3xz + 2yz$
10. Factorise: $10ps - 2pq + 15qs - 3q^2$
11. Factorise: $abx + 3abd - 5xc - 15cd$
12. Factorise: $pqx + 2pqr - 4ry - 2rx$
13. Factorise: $x^2y^2 - 4y^2 + 5x^2 - 20$
14. Factorise: $2 - 18a^2 - 3b + 27a^2b$
15. Factorise: $x^2y^2 - x^2 - 9y^2 + 9$
16. Factorise: $3ab - 21a + 9b - 63$
17. Factorise: $4cd + 8d^2 - 8cf - 16df$
18. Factorise: $x^3 + 3x^2y - 5x^2z - 15xyz$
19. Factorise: $ax + ay - az - bx - by + bz$
20. Factorise: $cd - 3c - 2d - 2f + cf + 6$