

A. Factorise the following

1. $6x + 18$
2. $12a + 20$
3. $15x^2 - 25x$
4. $18ab + 24a$
5. $14xy - 21y$
6. $8m^2 + 12m$
7. $20p^2q - 15pq^2$
8. $9a^2b + 12ab^2$

9. $16x^3 - 24x^2$
10. $25mn + 35m^2n$
11. $18x^2y + 27xy^2$
12. $21a^3b - 14a^2b^2$
13. $10p^3 - 15p^2$
14. $24xy^2 + 36x^2y$
15. $28a^2b - 42ab^2$

16. $32x^3y + 40xy^2$
17. $27m^2n - 18mn^2$
18. $35a^3b + 49a^2b^2$
19. $12x^2y^3 - 18xy^4$
20. $45p^2q + 30pq^2$

B. Factorise the following

1. $x^2 - 25$
2. $4a^2 - 49$
3. $9x^2 - 16$
4. $25m^2 - 36n^2$
5. $y^2 - 81$
6. $x^2 + 10x + 25$
7. $a^2 + 14a + 49$

8. $x^2 - 12x + 36$
9. $4x^2 + 12x + 9$
10. $9a^2 - 30a + 25$
11. $x^2 + 16x + 64$
12. $25y^2 - 20y + 4$
13. $x^3 - 27$
14. $a^3 - 8$

15. $8x^3 - 125$
16. $27m^3 + 64n^3$
17. $x^3 + 64$
18. $8a^3 + b^3$
19. $27x^3 - 8y^3$
20. $125p^3 + 27q^3$

C. Factorise the following

1. $ax + ay + bx + by$
2. $3x^2 + 6x + 2xy + 4y$
3. $ab + ac + db + dc$
4. $x^2 + 3x + 2xy + 6y$
5. $ax + ay + cx + cy$
6. $2x^2 + 4x + 3xy + 6y$
7. $pq + pr + 2q + 2r$

8. $3ab + 3ac + 4b + 4c$
9. $x^2 + 5x + 2xy + 10y$
10. $4a^2 + 8a + 3ab + 6b$
11. $mn + mp + 2n + 2p$
12. $5x^2 + 10x + 2xy + 4y$
13. $ab + 2ac + 3b + 6c$
14. $6x^2 + 12x + xy + 2y$

15. $2ab + 2ac + 5b + 5c$
16. $x^2 + 7x + 3xy + 21y$
17. $4pq + 4pr + 7q + 7r$
18. $3a^2 + 6a + 5ab + 10b$
19. $2x^2 + 8x + 3xy + 12y$
20. $5mn + 5mp + 2n + 2p$