



In this worksheet you will practise grouping terms in pairs to extract common factors and simplify expressions. Read each question carefully and ensure you show your working.

Easy Questions

1. Factorise the expression $(2x + 6) + (3x + 9)$.
2. Factorise the expression $(x + 2) + (3x + 6)$.
3. Factorise the expression $(4y + 8) + (10y + 20)$.
4. Factorise the expression $(5a + 15) + (2a + 6)$.
5. Factorise the expression $(3m + 9) + (7m + 21)$.

Intermediate Questions

6. Factorise the expression $(2x + 4) + (5x + 10)$.
7. Factorise the expression $(6p + 12) + (9p + 18)$.
8. Factorise the expression $(8t + 16) + (3t + 6)$.
9. Factorise the expression $(2x - 4) + (5x - 10)$.
10. Factorise the expression $(3a - 15) + (2a - 10)$.
11. Factorise the expression $(4b + 8) + (6b + 12)$.
12. Factorise the expression $(10k + 15) + (4k + 6)$.
13. Factorise the expression $(7u + 14) + (9u + 18)$.
14. Factorise the expression $(2r + 6) + (8r + 24)$.
15. Factorise the expression $(5y - 20) + (3y - 12)$.
16. Factorise the expression $(4z + 20) + (6z + 30)$.
17. Factorise the expression $(3c + 9) + (5c + 15)$.
18. Factorise the expression $(6w - 12) + (2w - 4)$.
19. Factorise the expression $(2m + 8) + (6m + 24)$.
20. Factorise the expression $(9x + 18) + (4x + 8)$.

Hard Questions

21. Factorise the expression $3a^2 + 9a + 2a + 6$.
22. Factorise the expression $4x^2 - 2x + 8x - 4$.
23. Factorise the expression $5xy + 15y + 2x + 6$.
24. Factorise the expression $6ab + 18b + 4a + 12$.
25. Factorise the expression $2m^2 + 8m + 3m + 12$.
26. Factorise the expression $7pq + 21q + 10p + 30$.
27. Factorise the expression $3x^2 + 6x + 5x + 10$.
28. Factorise the expression $4y^2 + 12y + 3y + 9$.
29. Factorise the expression $8z^2 - 16z + 3z - 6$.
30. Factorise the expression $9k^2 + 27k + 2k + 6$.