



In this worksheet you will learn to recognise the pattern of the difference of two squares and factorise expressions accordingly. Recall that an expression of the form $a^2 - b^2$ can be factorised as $(a + b)(a - b)$.

Easy Questions

1. Factorise $x^2 - 9$.
2. Factorise $4y^2 - 25$.
3. Factorise $9 - 16z^2$.
4. Factorise $49a^2 - 4$.
5. Factorise $t^2 - 36$.

Intermediate Questions

6. Factorise $25x^2 - 9$.
7. Factorise $16y^2 - 49$.
8. Factorise $4x^2 - 64$.
9. Factorise $x^4 - 16$.
10. Factorise $100 - 9z^2$.
11. Factorise $64p^2 - q^2$.
12. Factorise $4x^2 - 49y^2$.
13. Factorise $144u^2 - 25v^2$.
14. Factorise $4(9x^2 - 25)$.
15. Factorise $49 - (3w)^2$.
16. Factorise $1 - 4y^2$.
17. Factorise $9p^4 - 16$.
18. Factorise $(2x + 3)^2 - (x - 1)^2$.
19. Factorise $(3a - 2)^2 - (a + 4)^2$.
20. Factorise $4(x + 5)^2 - 9(x - 2)^2$.

Hard Questions

21. Factorise $100x^2 - 49y^2$.
22. Factorise $(2x + 5)^2 - 4(x + 1)^2$.
23. Factorise $9(2a - 3)^2 - 16(a + 2)^2$.
24. Factorise $(x^2 + 4x + 4) - (2x + 5)^2$.
25. Factorise $(5x - 3)^2 - (2x + 1)^2$.
26. Factorise $(3y + 7)^2 - (y - 5)^2$.
27. Factorise $9 - (3x + 2)^2$.
28. Factorise $(4x - 1)^2 - 36$.
29. Factorise $(2x + 3)^2 - 4(x + 4)^2$.
30. Factorise $(5x + 2)^2 - (3x - 4)^2$.