# Difference of Two Squares

Factorise these…

1. $x^2 - 25$

2. $x^2 - 49$

3. $x^2 - 81$

4. $4x^2 - 81$

5. $100 - 4x^2$

6. $121 - 100x^2$

7. $x^2 - y^2$

8. $9x^2 - 100y^2$

9. $a^2b^2 - c^2d^2$

10. $a^2b^2 - 100b^2c^2$

11. $a^4 - b^6$

12. $16a^4 - 49b^6$

13. $49a^2b^4 - 100a^6b^8c^{10}$

14. $16x^2 - 225y^2$

15. $2x^2 - 5y^2$

16. $5x^2 - 45$

17. $7x^2 - 28$

18. $32 - 2x^2$

19. $2x^3y - 8xy^3$

20. $(x + 1)^2 - (x + 2)^2$

21. $9(x + 1)^2 - 16(x + 2)^2$

# Difference of Two Squares - Answers

Factorise these…

1. $(x+5)(x-5)$

2. $(x+7)(x-7)$

3. $(x+9)(x-9)$

4. $(2x+9)(2x-9)$

5. $(10+2x)(10-2x)$

6. $(11+10x)(11-10x)$

7. $(x+y)(x-y)$

8. $(3x+10y)(3x-10y)$

9. $(ab+cd)(ab-cd)$

10. $(ab+10bc)(ab-10bc)$

11. $(a^2+b^3)(a^2-b^3)$

12. $(4a^2+7b^3)(4a^2-7b^3)$

13. $(7ab^2+10a^3b^4c^5)(7ab^2-10a^3b^4c^5)$

14. $(4x+15y)(4x-15y)$

15. $(\sqrt{2}x+\sqrt{5}y)(\sqrt{2}x-\sqrt{5}y)$

16. $5(x+3)(x-3)$

17. $7(x+2)(x-2)$

18. $2(4+x)(4-x)$

19. $2xy(x+2y)(x-2y)$

20. $-(2x+3)$

21. $-(x+5)(7x+11)$