

Quadratic Sketching 2

Understanding quadratics fully is essential for GCSE and C1 and beyond. Sketch the following quadratic curves, labelling the coordinates of the turning points and where the curve crosses both the x and y -axes.

1. $y = (x - 3)(x + 4)$.

2. $y = (x + 1)^2 - 4$.

3. $y = x^2 + 3x - 4$.

4. $y = (2x - 1)(x + 5)$.

5. $y + 9 = x^2$.

6. $y = -x^2 - x + 6$.

7. $y = 2x^2 - 8x + 8$.

8. $y + x^2 = 2x + 35$.

9. $y = (-x + 3)^2 - 16$.

10. $y = (2 - x)^2 + 2$.

11. $y = -x^2 + 2x + 8$.

12. $y = x^2 - 6x + 5$.

13. $y = x^2 + 5x + 5$.

14. $y = 2x^2 - 10x - 3$.

15. $y = 5x^2 + 15x - 4$.

16. $y = x^2 - 6x + 11$.

17. $y = -3x^2 - 12x + 15$.

18. $y = -x^2 + 3x - 5$.