Factorising Harder Quadratics *Fluency* ANSWERS

Factorise

1 $2x^2 + 7x + 3$
$(2x + 1)(x + 3)$

2 $3x^2 + 7x + 2$
$(3x + 1)(x + 2)$

3 $2x^2 + 5x + 2$
$(2x + 1)(x + 2)$

4 $5x^2 + 11x + 2$
$(5x + 1)(x + 2)$

5 $3x^2 + 10x + 3$
$(3x + 1)(x + 3)$

6 $2x^2 + 9x + 4$
$(2x + 1)(x + 4)$

Factorise

7 $2x^2 + x - 3$
$(x - 1)(2x + 3)$

8 $3x^2 - 5x - 2$
$(x - 2)(3x + 1)$

9 $2x^2 - 3x - 5$
$(2x - 5)(x + 1)$

10 $5x^2 + 3x - 2$
$(5x - 2)(x + 1)$

11 $3x^2 + x - 4$
$(x - 1)(3x + 4)$

12 $2x^2 - x - 6$
$(x - 2)(2x + 3)$

Factorise

13 $2x^2 - 7x + 3$
$(x - 3)(2x - 1)$

14 $3x^2 - 8x + 4$
$(x - 2)(3x - 2)$

15 $5x^2 - 12x + 4$
$(x - 2)(5x - 2)$

16 $2x^2 - 11x + 5$
$(x - 5)(2x - 1)$

17 $3x^2 - 13x + 4$
$(x - 4)(3x - 1)$

18 $7x^2 - 15x + 2$
$(x - 2)(7x - 1)$

Factorise

19 $4x^2 + 8x + 3$
$(2x + 1)(2x + 3)$

20 $6x^2 + 7x + 2$
$(2x + 1)(3x + 2)$

21 $4x^2 - 4x - 3$
$(2x - 3)(2x + 1)$

22 $6x^2 - x - 2$
$(3x - 2)(2x + 1)$

23 $9x^2 - 12x + 4$
$(3x - 2)^2$

24 $8x^2 + 2x - 3$
$(2x - 1)(4x + 3)$

Factorise

25 $4x^2 - 9$
$(2x - 3)(2x + 3)$

26 $9x^2 - 25$
$(3x - 5)(3x + 5)$

27 $6x^2 + 15x + 6$
$3(2x + 1)(x + 2)$

28 $12x^2 - 2x - 4$
$2(3x - 2)(2x + 1)$

29 $16x^2 - 1$
$(4x - 1)(4x + 1)$

30 $18x^2 - 8$
$2(3x - 2)(3x + 2)$