GBR

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Quadratic Fractions

GCSE Higher Tier

Exercise

Simplify

1 $\dfrac{x^2 - 25}{2x^2 + 11x + 5}$

2 $\dfrac{x^2 - 36}{3x^2 + 19x + 6}$

3 $\dfrac{x^2 - 49}{3x^2 + 23x + 14}$

4 $\dfrac{x^2 - 64}{3x^2 + 29x + 40}$

5 $\dfrac{x^2 - 81}{2x^2 + 21x + 27}$

6 $\dfrac{x^2 - 16}{2x^2 - 13x + 20}$

7 $\dfrac{x^2 - 64}{2x^2 - 19x + 24}$

8 $\dfrac{x^2 - 25}{4x^2 - 23x + 15}$

9 $\dfrac{x^2 - 49}{2x^2 - 17x + 21}$

10 $\dfrac{x^2 - 4}{7x^2 - 17x + 6}$

11 $\dfrac{x^2 - 25}{2x^2 - 7x - 15}$

12 $\dfrac{x^2 - 81}{2x^2 - 15x - 27}$

13 $\dfrac{x^2 - 49}{2x^2 - 9x - 35}$

14 $\dfrac{x^2 - 36}{2x^2 - 5x - 42}$

15 $\dfrac{x^2 - 64}{3x^2 - 20x - 32}$

Answers

1 $\frac{(x+5)(x-5)}{(2x+1)(x+5)} = \frac{(x-5)}{(2x+1)}$

2 $\frac{(x+6)(x-6)}{(3x+1)(x+6)} = \frac{(x-6)}{(3x+1)}$

3 $\frac{(x+7)(x-7)}{(3x+2)(x+7)} = \frac{(x-7)}{(3x+2)}$

4 $\frac{(x+8)(x-8)}{(3x+5)(x+8)} = \frac{(x-8)}{(3x+5)}$

5 $\frac{(x+9)(x-9)}{(2x+3)(x+9)} = \frac{(x-9)}{(2x+3)}$

6 $\frac{(x+4)(x-4)}{(2x-5)(x-4)} = \frac{(x+4)}{(2x-5)}$

7 $\frac{(x+8)(x-8)}{(2x-3)(x-8)} = \frac{(x+8)}{(2x-3)}$

8 $\frac{(x+5)(x-5)}{(4x-3)(x-5)} = \frac{(x+5)}{(4x-3)}$

9 $\frac{(x+7)(x-7)}{(2x-3)(x-7)} = \frac{(x+7)}{(2x-3)}$

10 $\frac{(x+2)(x-2)}{(7x-3)(x-2)} = \frac{(x+2)}{(7x-3)}$

11 $\frac{(x+5)(x-5)}{(2x+3)(x-5)} = \frac{(x+5)}{(2x+3)}$

12 $\frac{(x+9)(x-9)}{(2x+3)(x-9)} = \frac{(x+9)}{(2x+3)}$

13 $\frac{(x+7)(x-7)}{(2x+5)(x-7)} = \frac{(x+7)}{(2x+5)}$

14 $\frac{(x+6)(x-6)}{(2x+7)(x-6)} = \frac{(x+6)}{(2x+7)}$

15 $\frac{(x+8)(x-8)}{(3x+4)(x-8)} = \frac{(x+8)}{(3x+4)}$