

Factorising quadratics ($ax^2 + bx + c$)

Grade 7 | Higher | 14 questions, 41 marks

GCSE Maths topic practice



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Name: _____ **Date:** _____ **Score:** _____ / 41

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

Answer _____

2 Factorise $2x^2 + 5x - 3$ (2 marks)

Answer _____

3 Factorise $3x^2 - 10x + 8$ (2 marks)

Answer _____

4 Factorise $4x^2 - 25$ (2 marks)

Answer _____

5 Solve $2x^2 + 5x - 12 = 0$ (3 marks)

Answer _____

6 Factorise fully $18x^2 - 50$ (3 marks)

Answer _____

7 Solve $3x^2 - 11x + 6 = 0$

(3 marks)

Answer _____

8 Solve $3x^2 = 5x + 2$

(3 marks)

Answer _____

9 Solve $5x^2 + 13x - 6 = 0$

(3 marks)

Answer _____

10 Simplify fully $\frac{2x^2 + 5x - 3}{4x^2 - 1}$

(3 marks)

Answer _____

11 Factorise $6x^2 - 7x - 20$

(3 marks)

Answer _____

12 The area of a rectangle is $(6x^2 + 11x - 10) \text{ cm}^2$. One side of the rectangle is $(3x - 2) \text{ cm}$.

a. Find an expression, in terms of x , for the length of the other side.

b. The perimeter of the rectangle is 26 cm. Work out the value of x .

(5 marks)

Answer _____

13 Solve $6x^2 + x - 12 = 0$

You must show clear algebraic working.

(4 marks)

Answer _____

14 Factorise $12x^2 + x - 6$

(3 marks)

Answer _____

End of questions | Total 41 marks