

Name: _____

GCSE (1 – 9)

Expanding and Factorising Quadratics

Instructions

- Use **black** ink or ball-point pen.
- Answer all Questions.
- Answer the Questions in the spaces provided
– *there may be more space than you need.*
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- You must **show all your working out.**

Information

- The marks for each Question are shown in brackets
– *use this as a guide as to how much time to spend on each Question.*

Advice

- Read each Question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every Question.
- Check your answers if you have time at the end

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1 Expand and simplify $(x + 7)(x - 3)$

.....
(Total for Question 1 is 2 marks)

2 (a) Expand and simplify $(2p - 3)(p - 5)$

(b) Factorise $a^2 + 15a + 36$ (2)

..... (2)
(Total for Question 2 is 4 marks)

3 (a) Expand and simplify $(x + 3)(x - 3)$

(b) Factorise $x^2 - 8x + 7$ (2)

..... (2)
(Total for Question 3 is 4 marks)



4 Expand and simplify $(m + 3)(m + 4)$

.....
(Total for Question 4 is 2 marks)

5 (a) Expand and simplify $(2x + 3)(3x - 1)$

(b) Factorise $x^2 + 10x + 25$ (2)

..... (1)
(Total for Question 5 is 3 marks)

6 (a) Expand and simplify $(4y + 3)(2y - 3)$

(b) Factorise $x^2 + 7x + 6$ (2)

..... (2)
(Total for Question 6 is 4 marks)



7 Expand and simplify $(x - 2)(x - 9)$

.....
(Total for Question 7 is 2 marks)

8 (a) Expand and simplify $(5h + 2)(h + 4)$

(b) Factorise $x^2 - 49$ (2)

..... (1)
(Total for Question 8 is 3 marks)

9 (a) Expand and simplify $(3x - 5)(2x - 3)$

(b) Factorise $n^2 - 3n - 18$ (2)

..... (2)
(Total for Question 9 is 4 marks)



10 Expand and simplify $(x + 6)(3x + 8)$

.....
(Total for Question 10 is 2 marks)

11 (a) Expand and simplify $(x - 6)(x - 7)$

(b) Factorise $x^2 - 16$

.....
(2)

.....
(1)

(Total for Question 11 is 3 marks)

12 (a) Expand and simplify $(2x + 1)(5x - 9)$

(b) Factorise $x^2 - 13x + 36$

.....
(2)

.....
(2)

(Total for Question 12 is 4 marks)



13 Expand and simplify $(a - 7)^2$

.....
(Total for Question 13 is 2 marks)

14 (a) Expand and simplify $(2x - 1)(x + 4)$

(b) Factorise $x^2 - 100$ (2)

..... (1)
(Total for Question 14 is 3 marks)

15 (a) Expand and simplify $(3d - 2)(d + 7)$

(b) Factorise $x^2 - 3x - 40$ (2)

..... (2)
(Total for Question 15 is 4 marks)



16 Factorise $n^2 + 3n - 28$

.....
(Total for Question 16 is 2 marks)

17 (a) Expand and simplify $(a - 5)(a + 6)$

(b) Factorise $b^2 - 81$ (2)

..... (1)
(Total for Question 17 is 3 marks)

18 (a) Expand and simplify $(2x + 5)(x + 9)$

(b) Factorise $y^2 - 7y + 12$ (2)

..... (2)
(Total for Question 18 is 4 marks)



19 Factorise $m^2 - m - 30$

.....
(Total for Question 19 is 2 marks)

20 (a) Expand and simplify $(5a - 1)(2a - 7)$

(b) Factorise $b^2 - 144$ (2)

..... (1)
(Total for Question 20 is 3 marks)

21 (a) Expand and simplify $(7x + 1)(x + 5)$

(b) Factorise $y^2 + 13y + 30$ (2)

..... (2)
(Total for Question 21 is 4 marks)

