

Name:

Date:

Expanding and Factorising

GCSE

Edexcel
Mathematics
Grade (9-1)

Mark

Score (%)

<hr/> 68

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Materials

For this paper you must have:

- Ruler
- Pencil, Rubber, Protractor and Compass
- Scientific calculator, which you are expected to use when appropriate

Instructions

- Answer all questions
- Answer questions in the space provided
- All working must be shown
- Do all rough work in this book. Cross out any rough work you don't want to be marked

Information

- The marks for the questions are shown in brackets

1 (a) Expand $3(x + 3)$

.....
(1)

(b) Factorise $4y + 12$

.....
(1)

(Total for question 1 is 2 marks)

2 (a) Expand $5(3b - 2)$

.....
(1)

(b) Solve $4(b + 2) = 24$

.....
(2)

(Total for question 2 is 3 marks)

3 (a) Factorise fully $8x^2 - 2x$

.....
(2)

(b) Solve $6(t - 8) = 42$

.....
(2)

(Total for question 3 is 4 marks)

4 (a) Expand $8(3f - 2)$

.....

(1)

(b) Factorise $20 - 4f$

.....

(1)

(Total for question 4 is 2 marks)

5 (a) Factorise fully $9m^2 - 12mp$

.....

(2)

(b) Expand $4(2y - 4z)$

.....

(1)

(Total for question 5 is 3 marks)

6 (a) Factorise $18m + 24$

.....

(1)

(b) Solve $6(a - 8) = 42$

.....

(2)

(Total for question 6 is 3 marks)

7 (a) Expand $l(l - 3)$

.....

(1)

(b) Factorise $32q + 8$

.....

(1)

(Total for question 7 is 2 marks)

8 (a) Factorise fully $10x^2 - 4xy$

.....

(2)

(b) Solve $2(x - 4) = 13$

.....

(2)

(Total for question 8 is 4 marks)

9 (a) Factorise $x^2 - 9x$

.....

(2)

(b) Expand $6(5d + 1)$

.....

(2)

(Total for question 9 is 4 marks)

10 (a) Expand $3(5x - 8y + 2z)$

.....

(2)

(b) Factorise $18w + 15$

.....

(1)

(Total for question 10 is 3 marks)

11 (a) Expand $h(2h - 3)$

.....

(1)

(b) Expand and Simplify $4(h + 5) + 3(h - 2)$

.....

(2)

(Total for question 11 is 3 marks)

12 (a) Factorise fully $7xy + 21x$

.....

(2)

(b) Solve $6(x + 3) = 42$

.....

(2)

(Total for question 12 is 4 marks)

13 (a) Expand $b(b + c)$

.....

(1)

(b) Factorise $15c - 6$

.....

(1)

(Total for question 14 is 2 marks)

14 (a) Expand $3k(3y - 8)$

.....

(b) Expand and Simplify $10(t - 4) + 5(t + 2)$

(2)

.....

(2)

(Total for question 15 is 4 marks)

15 (a) Factorise fully $28y^3 + 12y$

.....

(2)

(b) Solve $5(i - 2) = 22$

.....

(2)

(Total for question 16 is 4 marks)

16 (a) Expand $x^2(8 - 2x)$

.....

(2)

(b) Factorise $6w + 10x$

.....

(1)

(Total for question 16 is 3 marks)

17 (a) Expand $2w^2(3w - 5)$

.....

(2)

(b) Expand and Simplify $6(y + 3) - 5(y + 4)$

.....

(2)

(Total for question 17 is 4 marks)

18 (a) Factorise fully $20a^2 + 40ab$

.....

(2)

(b) Solve $3(g + 9) = 21$

.....

(2)

(Total for question 18 is 4 marks)

19 (a) Expand $k(5k + 1)$

.....

(1)

(b) Factorise $18m + mn$

.....

(1)

(Total for question 19 is 2 marks)

20 (a) Expand $3x(7x^2 - y)$

.....

(2)

(b) Expand and Simplify $3(6d + 5) - 2(4d - 1)$

.....

(2)

(Total for question 20 is 4 marks)

21 (a) Factorise fully $18a^2b + 30ab^2$

.....

(2)

(b) Expand and Simplify $4(2r - 7) - 3(5r - 3)$

.....

(2)

(Total for question 21 is 4 marks)