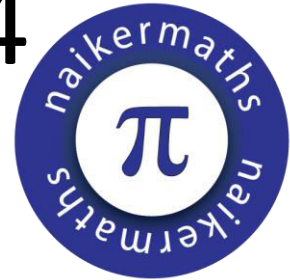


Name:.....

Total Marks:.....

# GCSE (9-1) Grade 4

## Expand and Factorise



### Instructions

Use **black** ink or ball-point pen.

**Fill in the boxes** at the top of this page with your name.

Answer **all** questions.

Answer the questions in the spaces provided

– there may be more space than you need.

**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.

Questions labelled with an **asterisk** (\*) are ones where the quality of your written communication will be assessed

### Advice

Read each question carefully before you start to answer it

Attempt every question

Check your answers if you have time at the end

Name:.....

Total Marks:.....

# GCSE (9-1) Grade

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1. (a) Factorise  $8x - 20$

.....  
(1)

(b) Factorise fully  $10x^2 - 15xy$

.....  
(2)

**(3 marks)**

---

2. (a) Factorise  $3x + 12$

.....  
(1)

(b) Factorise fully  $2x^2 - 4xy$

.....  
(2)

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

.....  
(2)

**(5 marks)**

---

3. (a) Expand  $3(2y - 5)$

.....  
(1)

(b) Factorise completely  $8x^2 + 4xy$

.....  
(2)

**(3 marks)**

---

4. (a) Expand  $4(3x + 5)$

.....  
(1)

(b) Expand and simplify  $3(x - 4) - 2(x + 5)$

.....  
(2)  
**(3 marks)**

5. (a) Factorise  $x^2 + 7x$

.....  
(2)

(b) Expand  $x(x + 2)$

.....  
(2)

(c) Factorise completely  $2y^2 - 4y$

.....  
(2)  
**(6 marks)**

6. (a) Expand  $3(4x + y)$

(2)

(b) Expand  $5p(p - 3)$

.....  
(2)

(c) Factorise completely  $8y^2 - 24xy$

.....  
(2)

.....  
(2)  
**(6 marks)**

7. (a) Expand and simplify  $3(x + 4) + 2(5x - 1)$

.....  
(2)

(b) Factorise completely  $6y^2 - 9xy$

.....  
(2)

**(4 marks)**

---

8. (a) Factorise fully  $6y^2 + 12y$

(2)

(b) Factorise  $5x - 10$

.....

.....  
(1)

(c) Factorise fully  $2p^2 - 4pq$

.....  
(2)

**(5 marks)**

---

9. (a) Expand and simplify  $3(x + 5) + 2(5x - 6)$

.....  
(2)

(b) Factorise  $5x + 10$

.....  
(1)

(c) Factorise  $x^2 - 7x$

.....  
(1)

**(4 marks)**

---

10. (a) Expand  $x(x + 2)$   
.....  
(2)

(b) Factorise  $15x - 10$   
.....  
(2)

(c) Expand and simplify  $2(x - y) - 3(x - 2y)$   
.....  
(2)  
**(6 marks)**

---

11. (a) Factorise  $4x + 10$   
.....  
(1)

(b) Factorise fully  $6y^2 + 12y$   
.....  
(2)

(c) Factorise  $4 + 6x$   
.....  
(2)  
**(5 marks)**

---

12. (a) Expand  $3(2y - 5)$   
.....  
(1)

(b) Factorise completely  $8x^2 + 4xy$   
.....  
(2)

(c) Factorise  $4x + 10y$   
.....  
(2)  
**(5 marks)**

---

13. (a) Expand  $3(x + 4)$   
.....  
(1)
- (b) Expand  $x(x^2 + 2)$   
.....  
(2)
- (c) Factorise  $x^2 - 6x$   
.....  
(1)
- 
- (4 marks)**

14. (a) Factorise  $p^2 + p$   
.....  
(1)
- (b) Factorise  $x^2 + 7x$   
.....  
(1)
- (c) Expand and simplify  $4(x - 3) - 2(1 - x)$   
.....  
(2)
- 
- (4 marks)**

15. (a) Factorise  $4x + 10y$   
.....  
(1)
- (b) Factorise  $x^2 + 7x$   
.....  
(1)
- (c) Expand  $x^2(x + 5)$   
.....  
(2)
- 
- (4 marks)**

16. (a) Expand  $5(2y - 3)$   
 ..... (1)
- (b) Expand the brackets  $p(q - p^2)$   
 ..... (1)
- (c) Expand and simplify  $5(3p + 2) - 2(5p - 3)$   
 ..... (2)
- (4 marks)**
- 

17. (a) Expand  $3(2g - 1)$   
 ..... (1)
- (b) Expand  $2d(d + 3)$   
 ..... (2)
- (c) Factorise  $p^2 + 6p$   
 ..... (2)
- (5 marks)**
- 

18. (a) Multiply out  $7(n - 3)$   
 ..... (1)
- (b) Expand  $5(2y - 3)$   
 ..... (1)
- (c) Expand and simplify  
 $2(3x + 4) - 3(4x - 5)$   
 ..... (2)
- (4 marks)**
-



19. (a) Expand  $y(y^3 + 2y)$   
 ..... (2)
- (b) Factorise completely  $6x^2 - 9xy$   
 ..... (2)
- (c) Expand and simplify  $5(3p + 2) - 2(5p - 3)$   
 ..... (2)
- 
- (6 marks)**

20. Expand the brackets
- (i)  $4(2x - 3)$   
 ..... (2)
- (ii)  $p(q - p^2)$   
 ..... (2)
- (ii)  $t(3t^2 + 4)$   
 ..... (2)
- 
- (6 marks)**

21. (a) Factorise  $3t - 12$   
 ..... (2)
- (b) Factorise  $y^2 + y$   
 ..... (1)
- (c) Expand and simplify  $3(2x - 1) - 2(2x - 3)$   
 ..... (2)
- 
- (6 marks)**