Name:

GCSE (1 - 9)

Simplifying Algebra

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

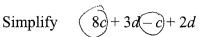
- The marks for each question are shown in brackets
- use this as a guide as to how much time to spend on each question.

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

	Simplify $3x + 4x - 2x$		
	7x - 2x		
			5 x
		(Total for	question 1 is 1 mark)
	Simplify $3m + 3m$		
			6 m
*************		(Total for	question 2 is 1 mark)
	Simplify $n + n + n$		
			3n
		(Total for	question 3 is 1 mark
	(a) Simplify $a \times b \times c$		aha
			(1)
	(b) Simplify $5p - 2p$		
			3p
	(c) Simplify $\frac{6h}{3}$		(k)
			21
			(1) or question 4 is 3 marl

_	G' 1:0 1 1 0	
5	Simplify $k + k + 8$	
	•	n
		2k + 8 (Total for question 5 is 1 more)
***************************************		(Total for question 5 is 1 mark)
,	(a) Simplify $4 \times 3x$	
	(a) 2 map may 1 2 m	
		12x
	(b) Simplify $7a - 3a + 6a$	(1)
	4a + 6a	
	·	
		10a
		(1)
		(Total for question 6 is 2 marks)
,	Simplify $(8g) + 6h - 3g + h$	
	Simplify $(8g) + 6h - 3g + h$	
		59 + 7h
		(Total for question 7 is 2 marks)
	(a) Simplify $3 \times b \times 9$	
		276
	(b) Simplify $(2x) - 3y - 6x - 4y$	(1)
		-4x-7y
		(2)
***************************************		(Total for question 8 is 3 marks)



7c + 5d

(Total for question 9 is 2 marks)

- (a) Simplify f+f+f+f+f**10**
 - (b) Simplify (5a) + 3b + 2a + 2b

7a + 5b

(Total for question 10 is 3 marks)

- 11 (a) Simplify $2a \times 3b$
 - (b) Simplify $2p \times 2p$
 - (c) Simplify $\frac{7x + 5x}{4}$

3x

(Total for question 11 is 3 marks)

12	Simplify	(11c)-8d+5c+a

16	î C	 9	d	/
_			_	

(Total for question 12 is 2 marks)

13 (a) Simplify
$$3a \times 4b$$

(b) Simplify
$$(3x) + 2y + 6x - y$$

$$\frac{9 \times + 9}{(2)}$$
(Total for question 13 is 3 marks)

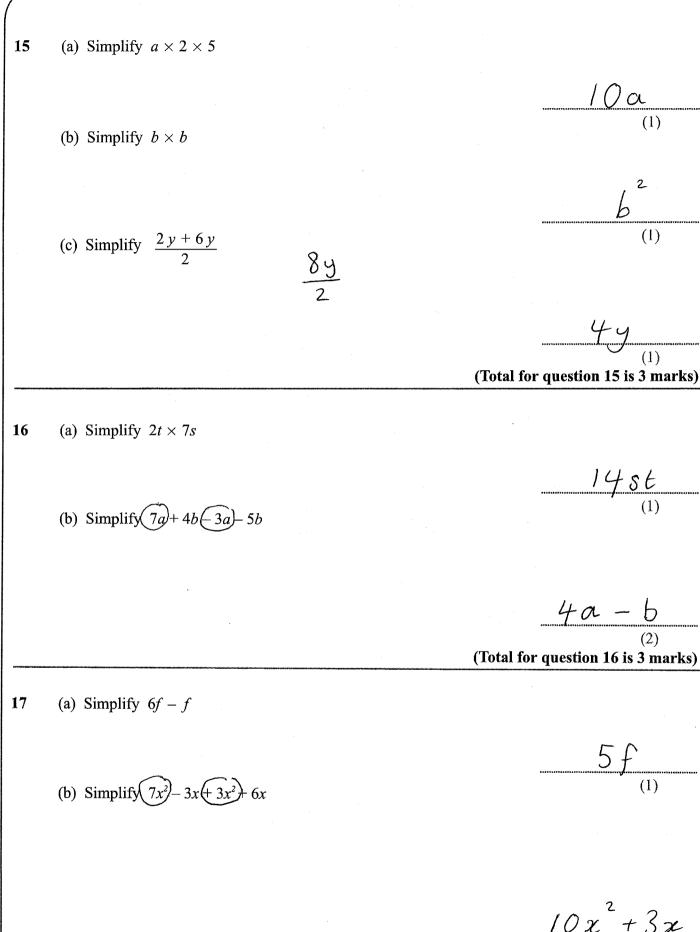
14 (a) Simplify $a \times b \times 3$

(b) Simplify
$$y \times y \times y$$

(c) Simplify
$$\frac{10 d}{d}$$

(1)

(Total for question 14 is 3 marks)



 $\frac{10x^2 + 3x}{(2)}$

(Total for question 17 is 3 marks)

- 18 Simplify
- $2 \times n \times 6 \times m$

12mn

12mn

(Total for question 18 is 1 mark)

- 19 (a) Simplify $6j \times 5k$
 - (b) Simplify (7a) 6b + 5a + 4b

30jk

12a - 2b

(Total for question 19 is 3 marks)

20 (a) Simplify 4n-3n+5n

(b) Simplify $p^2 + p^2 + p^2$

6n

(c) Simplify 5 + 2a + 7b - 6a + b

 $3\rho^{2}$ (1)

5-4a+8b

(2)

(Total for question 20 is 4 marks)

21 (a) Simplify $a^2 + a^2 + a^2$

,	2	2
	\mathcal{A}	,
		(1)

(b) Simplify 2rs - 5rs + 4rs -3rs + 4rs

(c) Simplify 4a + 2 - 7a + a = 6

 $\frac{-2\alpha - 4}{\text{(2)}}$ (Total for question 21 is 4 marks)

22 (a) Simplify n + n + n - n

$$3n-n$$

2n

(b) Simplify 3xy + 2xy - xy $5 \propto y - \propto y$

4xy

(c) Simplify (4a) + 3b(-a) + 3b + 6

3a + 6b + 6

(Total for question 22 is 4 marks)