Edexcel GCSE

Mathematics (Linear) – 1MA0

ALGEBRA: COLLECTING LIKE TERMS

Materials required for examination

Ruler graduated in centimetres and millimetres, protractor, compasses, pen, HB pencil, eraser.

Tracing paper may be used.

Items included with question papers



Instructions

Use black ink or ball-point pen.

Fill in the boxes at the top of this page with your name, centre number and candidate number. Answer all questions.

Answer the questions in the spaces provided – there may be more space than you need. Calculators may be used.

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 – you should take particular care on these questions with your spelling, punctuation and grammar, as well as the clarity of expression.

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.

1.	Simp	plify	
		(i) $c+c+c+c$	
		(ii) $p \times p \times p \times p$	
		(iii) $3g + 5g$	
		(iv) $2r \times 5p$	
			(4) (Total 4 marks)
2.	(a)	Simplify $5p + 2q - 3p - 3q$	
	<i>a</i> >	a. u.c	(2)
	(b)		
		(i) $3g + 5g$	
		(ii) $2r \times 5p$	
			(2)
			(Total 4 marks)
3.	(a)	Simplify $y + y$	
			(1)
	(b)	Simplify $p^2 + p^2 + p^2$	
	(0)		
			(1) (Total 2 marks)
			(10tal 2 marks)

4.	Simp	plify			
	(a)	c + c + c			
					(1)
	(b)	e+f+e+f+e			()
					(1)
	(c)	2a + 3a			
					(1)
	(1)				
	(d)	2xy + 3xy - xy			
					(1)
	(e)	3a + 5b - a + 2b + 8			(0)
				(Total 6	(2) marks)
5.	(a)	Simplify			
.	(u)	Simping	$2x \times y \times 3$		
					(1)
	(b)	Simplify			
			5x + 3y - 2x + y		
					(2)
	(c)	Simplify	$y \times y \times y$		
					(1)
				(Total 4	marks)

6.	(a)	Simplify	5bc + 2bc - 4bc	
				(1)
	(b)	Simplify	4x + 3y - 2x + 2y	
				(2)
	(c)	Simplify	$m \times m \times m$	
				(1)
	(d)	Simplify	$3n \times 2p$	
				(Total 5 marks)
7.	(a)	Simplify	a + a + a + a	
				(1)
	(b)	Simplify	$3 \times b \times 4$	
				(1)
	(c)	Simplify c	completely $4a + 5b - 2a + b$	
				(2)
8.	(0)	Simplify	2a+7b-3b+a	(Total 4 marks)
0.	(a)	Simplify	2a + 7b - 3b + a	
	(b)	Simplify	$x^{3} + x^{3}$	(2)
	. ,			
				(Total 3 marks)

		Simplify $4p \times 5q$	(a)	9.
(1)				
	d	Simplify $d \times d \times d$	(b)	
(1) (Total 2 marks)				
		olify	Simp	10.
		(i) $5g-2g$		
(1)				
		(ii) $p \times p$		
(1) (Total 2 marks)				
	+2q-p+2q	Simplify	(a)	11.
(2)				
	$-y^2$	Simplify	(b)	
(1)	+7d - 2c - 3d	Simplify	(c)	
(2)				
	imes 2q	Simplify	(d)	
(1) (Total 6 marks)				

	(b)	Simplify $y^2 + y^2$	(1)
			(1)
	(c)	c) Simplify	
		(i) $3a + 4b - 2a - b$	
			(2)
		(ii) $5x^2 + 2x - 3x^2 - x$	
		(°	(2) Fotal 6 marks)
13.	(a)	Simplify $4x + 7y + 2x - 3y$	
			(2)
	(b)	Simplify $2pq + pq$	
			(1)
14.	(a)		Fotal 3 marks)
		$(i) \qquad e+f+e+f+e$	
			(1)
		(ii) $p^2 + p^2 + p^2$	(1)
		((1) Γotal 2 marks)

12. (a) Simplify d + d + d + d + d

15. (a) Simplify		
(i) $e + f + e + f + e + f + e$		
	(1	
(ii) $p^2 + p^2 + p^2$		
	(1	
	(Total 2 marks	
16. (a) Simplify $2x + 2x$		
(b) Simplify $5y - 2y$	(1	
(c) Simplify $2 \times 4p$	(1	
	(1	
	(Total 3 marks	
17. (a) Simplify $c + c + c$		
	(1	
(b) Simplify $2e \times 3f$		
	(1	
(c) Simplify $9p + 2t - 2p + 3t$		
	(2	

(Total 4 marks)

	f+f+f+f-f	Simplify	(a)	18.
(1)	$2m \times 3$	Simplify	(b)	
(1)	3a + 2h + a + 3h	Simplify	(c)	
(2) (Total 4 marks)				
(Iour Finalis)	a + a + a + a	Simplify	(a)	19.
(1)	$3 \times c \times d$	Simplify	(b)	
(1)	3ef + 5ef - ef	Simplify	(c)	
(1) (Total 3 marks)				
(1)	d+d+d+d	Simplify <i>d</i> +	(a)	20.
(1)	$m \times 2$	Simplify $3 \times$	(b)	
(2)	+3j-2k+5j	Simplify 6k +	(c)	
(Total 4 marks)				