



GCSE Foundation 10

Algebra



75 minutes



74 marks

Simplifying expressions

M1. (a) 24

B1

(b) $7c + 3d$ or $3d + 7c$

B1 for $7c$ or $3d$

Do not ignore further working

B2

(c) 3×4 and 5×-2 or 12 and -10
oe

M1

2

A1

[5]

M2. (a) 50

B1

(b) $(2y) = 8 + 3$ or $(2y) = 11$

M1

$5\frac{1}{2}$ or 5.5 or $\frac{11}{2}$
oe

A1

(c) $5m - 7p$

B1 for $5m$ or $-7p$

Award B1 if further working seen after correct answer

B2

[5]

M3. (a) (i) $5m$

Strand (i)

Do not accept $m5$

Q1

(ii) $5a + 3b$

B1 for $5a$ or $3b$

B2

(b) Recognises both brackets are odd

oe

for $n^2 - 1$, even \times even = even

M1

odd \times odd = odd

oe

for $n^2 - 1$, even $- 1 =$ odd

A1

[5]

M4.

(a)

49

25

10

B1 for one correct

or for their $25 + 24$ in top cell

B2

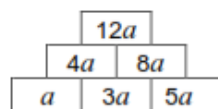
(b) $4a$

B1

$8a$ or $12a -$ their $4a$

B1 ft

$5a$ or their $8a - 3a$



B1 ft

[5]

M5.

Never true

B1

Sometimes true

B1

Sometimes true

B1

[3]

M6. (a) $3 \times 4 (+) 2 \times -5$ or $12 (+) -10$

M1

2

A1

(b) $(c =) 12$

B1

(c) $6w - 8 = 7$

$3w - 4 = 3.5$

M1

$6w = 7 + 8$ or $6w = 15$

$3w = 3.5 + 4$ or $3w = 7.5$

M1

$(w =) 2.5$

oe eg $\frac{15}{6}$ or $\frac{5}{2}$ or $2\frac{1}{2}$

A1

(d) $a^3 + 4a$

B1 for a^3 or $4a$

Do not accept a^4

B2

[8]

M7. (a) $2 \times 5 (+) 3 \times 8$ or 10 or 24

M1

34

A1

(b) $6m - 12$ or $5m + 10$

M1

$11m - 2$

A1

[4]

M8.	(a) 12	B1	[8]
	(b) $(4 + 10) \div 2$	M1	
	7	A1	
	(c) $4a + 8b$ or $4(a + 2b)$ <i>B1 for one term correct</i>	B2	
	(d) $5w + w = 9 - 6$ <i>Allow one sign error</i>	M1	
	$6w = 3$ <i>For collecting like terms ft their first line</i>	M1	[8]
	$\frac{1}{2}$	A1	
	oe Accept $\frac{3}{6}$	A1	

M9.	(a) $7c$	B1	[3]
	(b) $4x - 3y$ <i>B1 For $4x$ or $-3y$</i>	B2	

M10.	(a) $10x + 6y$ <i>B1 For $10x$ or $6y$</i>	B2	[4]
	(b) $8x + 10y$ <i>B1 For $8x$ or $10y$</i>	B2	

M11.	(a) $12a - 3b$	<i>B1 For one correct term seen, 12a or $-3b$</i>	B2	[3]
	(b) $x^2 + 7x$		B1	
M12.	(a) $3a$	<i>Allow $3 \times a$ and $a \times 3$; not $a3$</i>	B1	[4]
	(b) $6b + 10$	<i>B1 for $6b$ or $+10$ fw eg, $16b$; deduct 1 mark</i>	B2	
	(c) 12		B1	
M13.	(a) (i) 24 and 26		B1	[8]
	50		B1 ft	
	(ii) 2 -3		B1 + B1	
	-1	<i>ft with at least 1 negative number used</i>	B1 ft	
	(b) $3a$ $5a$		B1 + B1	
	$8a$	<i>With consistent use of a</i>	B1 ft	
M14.	(a) $(27 + 3) \div 5$	<i>or $30 \div 5$ or $5 \times 6 - 3$</i>	M1	
	6		A1	

(b) $5(x + 2)$

oe
B1 $x + 2$ or $5 \times$ (their $x + 2$) or $5x + 2$

B2

[4]

M15. (a) $3x + 7y$

B1 for 1 term correct

B2

(b) $5 \times 4 (+) 2 \times -7$ or sight of 20 and -14

M1

6

A1

(c) $25 (-) 9$

M1

16

A1

[6]

