



Mark Scheme (Results)

Summer 2025

Pearson Edexcel GCSE

In Mathematics (1MA1)

Foundation (Non-Calculator) Paper 1F

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications are awarded by Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at www.edexcel.com or www.btec.co.uk. Alternatively, you can get in touch with us using the details on our contact us page at www.edexcel.com/contactus.

Pearson: helping people progress, everywhere

Pearson aspires to be the world's leading learning company. Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk

Summer 2025

Question Paper Log Number P76402A

Publications Code 1MA1_1F_2506_MS

All the material in this publication is copyright

© Pearson Education Ltd 2025

General marking guidance

These notes offer general guidance, but the specific notes for examiners appertaining to individual questions take precedence.

- 1 All candidates must receive the same treatment. Examiners must mark the last candidate in exactly the same way as they mark the first.

Where some judgement is required, mark schemes will provide the principles by which marks will be awarded; exemplification/indicative content will not be exhaustive. When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the response should be sent to review.

- 2 All the marks on the mark scheme are designed to be awarded; mark schemes should be applied positively. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme. If there is a wrong answer (or no answer) indicated on the answer line always check the working in the body of the script (and on any diagrams), and award any marks appropriate from the mark scheme.

Questions where working is not required: In general, the correct answer should be given full marks.

Questions that specifically require working: In general, candidates who do not show working on this type of question will get no marks – full details will be given in the mark scheme for each individual question.

- 3 **Crossed out work**

This should be marked **unless** the candidate has replaced it with an alternative response.

- 4 **Choice of method**

If there is a choice of methods shown, mark the method that leads to the answer given on the answer line.

If no answer appears on the answer line, mark both methods **then award the lower number of marks.**

- 5 **Incorrect method**

If it is clear from the working that the "correct" answer has been obtained from incorrect working, award 0 marks. Send the response to review for your Team Leader to check.

- 6 **Follow through marks**

Follow through marks which involve a single stage calculation can be awarded without working as you can check the answer, but if ambiguous do not award.

Follow through marks which involve more than one stage of calculation can only be awarded on sight of the relevant working, even if it appears obvious that there is only one way you could get the answer given.

7 Ignoring subsequent work

It is appropriate to ignore subsequent work when the additional work does not change the answer in a way that is inappropriate for the question or its context. (eg. an incorrectly cancelled fraction when the unsimplified fraction would gain full marks).

It is not appropriate to ignore subsequent work when the additional work essentially makes the answer incorrect (eg. incorrect algebraic simplification).

8 Probability

Probability answers must be given as a fraction, percentage or decimal. If a candidate gives a decimal equivalent to a probability, this should be written to at least 2 decimal places (unless tenths).

Incorrect notation should lose the accuracy marks, but be awarded any implied method marks.

If a probability fraction is given then cancelled incorrectly, ignore the incorrectly cancelled answer.

9 Linear equations

Unless indicated otherwise in the mark scheme, full marks can be gained if the solution alone is given on the answer line, or otherwise unambiguously identified in working (without contradiction elsewhere). Where the correct solution only is shown substituted, but not identified as the solution, the accuracy mark is lost but any method marks can be awarded (embedded answers).

10 Range of answers

Unless otherwise stated, when an answer is given as a range (e.g 3.5 – 4.2) then this is inclusive of the end points (e.g 3.5, 4.2) and all numbers within the range.

11 Number in brackets after a calculation

Where there is a number in brackets after a calculation E.g. $2 \times 6 (=12)$ then the mark can be awarded **either** for the correct method, implied by the calculation **or** for the correct answer to the calculation.

12 Use of inverted commas

Some numbers in the mark scheme will appear inside inverted commas E.g. "12" $\times$ 50 ; the number in inverted commas cannot be any number – it must come from a correct method or process but the candidate may make an arithmetic error in their working.

13 Word in square brackets

Where a word is used in square brackets E.g. [area] $\times$ 1.5 : the value used for [area] does **not** have to come from a correct method or process but is the value that the candidate believes is the area. If there are any constraints on the value that can be used, details will be given in the mark scheme.

14 Misread

If a candidate misreads a number from the question. Eg. uses 252 instead of 255; method or process marks may be awarded provided the question has not been simplified. Examiners should send any instance of a suspected misread to review.

Guidance on the use of abbreviations within this mark scheme

M	method mark awarded for a correct method or partial method
P	process mark awarded for a correct process as part of a problem solving question
A	accuracy mark (awarded after a correct method or process; if no method or process is seen then full marks for the question are implied but see individual mark schemes for more details)
C	communication mark awarded for a fully correct statement(s) with no contradiction or ambiguity
B	unconditional accuracy mark (no method needed)
oe	or equivalent
cao	correct answer only
ft	follow through (when appropriate as per mark scheme)
sc	special case
dep	dependent (on a previous mark)
indep	independent
awrt	answer which rounds to
isw	ignore subsequent working

Paper: 1MA1/1F				
Question	Answer	Mark	Mark scheme	Additional guidance
1	5e	B1	cao	
2	0.75	B1	cao	
3	6	B1	cao	
4	32	B1	cao	
5	Acute	B1	cao	
6 (a)	42	B1	cao	
(b)	Yes (supported)	P1	for a start to a process to find figures to compare, eg $33 + 40 + 27 (= 100)$ or $20 + 14 + 15 (= 49)$ or $(33 - 20) + (40 - 14) + (27 - 15) (= 51)$	
		P1	for complete process to give figures to compare, eg $33 + 40 + 27 (= 100)$ and $20 + 14 + 15 (= 49)$ and $“49” \times 2 (= 98)$ or $33 + 40 + 27 (= 100)$ and $20 + 14 + 15 (= 49)$ and $“100” \div 2 (= 50)$ or $33 + 40 + 27 (= 100)$ and $20 + 14 + 15 (= 49)$ and $“100” - “49” (= 51)$ or $33 + 40 + 27 (= 100)$ and $20 \times 2 + 14 \times 2 + 15 \times 2 (= 98)$ or $(33 - 20) + (40 - 14) + (27 - 15) (= 51)$ and $20 + 14 + 15 (= 49)$	
		C1	for Yes with correct supporting figures, eg 100 and 98 or 50 and 49 or 100 and 49 and 51 or 51 and 49	

Paper: 1MA1/1F				
Question	Answer	Mark	Mark scheme	Additional guidance
7 (a)	Completed bar chart	B2	for a fully correct bar chart	Condone bars of unequal width Condone no gaps or inconsistent gaps
		(B1	for one bar correct, eg '50p' plotted at 8 or '£1' plotted at 3 or both reversed ie '50p' plotted at 3 and '£1' plotted at 8)	
(b)	Shown	M1	for method to find total amount of at least two coin types, from $10(p) \times 12 (= 120(p))$, $20(p) \times 7 (= 140(p))$, $50(p) \times 8 (= 400(p))$, $(£)1 \times 3 (= 300(p) \text{ or } (£)3)$	Accept mixed units for both method marks e.g. $10p \times 12 (= 120)$, $20 \times 7 (= 1.4)$, $50(p) \times 8 (= 4)$, $1 \times 3 (= 300)$
		M1	for a complete method to find the total amount of money e.g. "120" + "140" + "400" + "300" (= 960) or "1.20" + "1.40" + "4" + "3" (= 9.60)	Accept mixed units for both method marks e.g. $120 + 140 + 4 + 3 (= 9.60)$
		C1	(dep on method shown for totals for at least two coin types or separate correct totals for at least two coin types) showing correct comparable figures eg (£)9.6(0) or 960(p) and 1000(p) or (£)0.4(0) or 40p	Answer must be in consistent units 9.60 oe alone with no working will score M1M1
8 (a)	Completed kite	B1	cao	Condone unruled lines.
(b)	Cylinder	B1		Allow circular prism, do not allow prism or circle alone Condone poor spelling
9 (a)	$x - 5$	B1	cao	Allow $-5 + x$
(b)	$2x$	B1		Allow $x + x$ or x^2 or $x \times 2$ or $2 \times x$
(c)	3	B1	cao	

Paper: 1MA1/1F				
Question	Answer	Mark	Mark scheme	Additional guidance
10 (a)	24 000	B1		
(b)	600	M1	for 6 or 100 or 98 used in a calculation	578.2 from 5.9×98 scores M1A0
		A1	for 600 (from 6×100) or 588 (from 6×98) or 590 (from 5.9×100) or 588.6 (from 6×98.1)	M0A0 for working with unrounded figures with answer rounded to 600 ISW rounding of an estimated answer e.g. rounding 588 to 600 Subtraction of additional products after a rounded calculation may score the M mark for 6 or 100 or 98, but will not score the A mark unless one of the acceptable answers is reached.
11 (a)	$\frac{3}{8}$	M1	for method to subtract using a correct common denominator, with at least one correct numerator, eg. $\frac{5}{8} - \frac{2}{8}$ or $\frac{10}{16} - \frac{4}{16}$ or $\frac{20}{32} - \frac{8}{32}$ or for correct method to convert both fractions to decimals and subtract, eg $0.625 - 0.25$	Do not condone working with fractions with decimal numerators unless it leads to a fraction or fractions where both numerator and denominator are integers.
		A1	for $\frac{3}{8}$ oe, eg $\frac{6}{16}$, $\frac{9}{24}$, $\frac{12}{32}$, 0.375	Ignore errors in cancelling after sight of an equivalent fraction to $\frac{3}{8}$
(b)	16	M1	for dividing by 5 and multiplying by 2, in any order or for 0.4×40 oe	Accept $\frac{2}{5} \times 40$ or $\frac{2}{5} \times \frac{40}{1}$
		A1	cao	

Paper: 1MA1/1F				
Question	Answer	Mark	Mark scheme	Additional guidance
12 (a)	08 47 supported	M1	for a method to find the time of one train from L to C, eg $08\ 53 - 08\ 07 (= 46)$ or $09\ 22 - 08\ 47 (= 35)$ or $09\ 55 - 09\ 07 (= 48)$	Subtraction must be written in the correct order or correctly evaluated for M marks. Do not allow misread of timetable.
		M1	for a complete method to find the time of all three trains from L to C eg $08\ 53 - 08\ 07 (= 46)$ and $09\ 22 - 08\ 47 (= 35)$ and $09\ 55 - 09\ 07 (= 48)$	
		C1	for 08 47 train with correct supporting journey times eg 08 47 train with 46, 35, 48 seen	
(b)	40	P1	for a complete process to find the number of minutes to wait for the train eg $35\ (\text{mins}) + (09\ 30 - 09\ 25)$ or $09\ 30 + 35 (= 10\ 05)$ and “10 05” – 09 25	Accept any clear identification of the 08 47 train, eg the second one or the middle one or indicated on the table
		A1	cao	
13 (a)	10	B1	cao	May be seen by machine
(b)	– 1	M1	starts method to find input using inverse operations eg $-11 + 8 (= -3)$ or sight of +8 and $\div 3$	Allow – – 8 for +8 Allow $\times \frac{1}{3}$ for $\div 3$ Do not allow a misread of 11 for –11 Embedded answer eg $-1 \times 3 - 8 = -11$ scores M1A0
		A1	for – 1	

Paper: 1MA1/1F				
Question	Answer	Mark	Mark scheme	Additional guidance
14	8	M1	for unit conversion for $1.6 \times 100\,000 (= 160\,000 \text{ (cm)})$ or $1.6 \times 1000 (= 1600 \text{ (m)})$ or for $20\,000 \div 100\,000 (= 0.2)$ or $20\,000 \div 100 (= 200)$ or $20\,000 \div 1000 (= 20)$ or $"0.00008" \times 1000 (= 0.08)$ or $"0.00008" \times 100\,000 (= 8)$	ie conversions to cm or m Do not award if conversion linked to incorrect unit eg $1.6 \times 1000 = 1600 \text{ cm}$ Answer of 160 000 centimetres scores M1M0A0
		M1	for use of scale [distance] $\div 20\,000$ or $1.6 \div "0.2"$ or $16 \div ("0.2" \times 10)$ or $1.6 \div "20" (= 0.08)$ or $"1600" \div "200" (= 8)$ or $1.6 \div 20\,000 (= 0.00008)$	
		A1	cao	Where [distance] is an attempt at converting km to m or cm, ie figs 16

Paper: 1MA1/1F																																																												
Question	Answer	Mark	Mark scheme	Additional guidance																																																								
15	64.8(0)	M1	for a complete method with relative place value correct including an intention to add all the appropriate elements of the calculation or for a complete method to find 35% of 48 or 0.48 and add this on eg 48 ÷ 10 (= 4.8) and “4.8” ÷ 2 (= 2.4) and 48 + 3 × "4.8" + "2.4"	1080 240 <u>5400</u> 1440 6480 <u>4800</u> 6480 <table><tr><td></td><td>1</td><td>3</td><td>5</td><td></td></tr><tr><td>0</td><td><table><tr><td>0</td><td>4</td></tr><tr><td>4</td><td></td></tr></table></td><td><table><tr><td>1</td><td>2</td></tr><tr><td>2</td><td></td></tr></table></td><td><table><tr><td>2</td><td>0</td></tr><tr><td>0</td><td></td></tr></table></td><td>4</td></tr><tr><td>6</td><td><table><tr><td>0</td><td>8</td></tr><tr><td>8</td><td></td></tr></table></td><td><table><tr><td>2</td><td>4</td></tr><tr><td>4</td><td></td></tr></table></td><td><table><tr><td>4</td><td>0</td></tr><tr><td>0</td><td></td></tr></table></td><td>8</td></tr><tr><td></td><td>4</td><td>8</td><td>0</td><td></td></tr></table> <table><tr><td></td><td>100</td><td>30</td><td>5</td></tr><tr><td>40</td><td>4000</td><td>1200</td><td>200</td></tr><tr><td>8</td><td>800</td><td>240</td><td>40</td></tr></table>		1	3	5		0	<table><tr><td>0</td><td>4</td></tr><tr><td>4</td><td></td></tr></table>	0	4	4		<table><tr><td>1</td><td>2</td></tr><tr><td>2</td><td></td></tr></table>	1	2	2		<table><tr><td>2</td><td>0</td></tr><tr><td>0</td><td></td></tr></table>	2	0	0		4	6	<table><tr><td>0</td><td>8</td></tr><tr><td>8</td><td></td></tr></table>	0	8	8		<table><tr><td>2</td><td>4</td></tr><tr><td>4</td><td></td></tr></table>	2	4	4		<table><tr><td>4</td><td>0</td></tr><tr><td>0</td><td></td></tr></table>	4	0	0		8		4	8	0			100	30	5	40	4000	1200	200	8	800	240	40
			1	3	5																																																							
		0	<table><tr><td>0</td><td>4</td></tr><tr><td>4</td><td></td></tr></table>	0	4	4		<table><tr><td>1</td><td>2</td></tr><tr><td>2</td><td></td></tr></table>	1	2	2		<table><tr><td>2</td><td>0</td></tr><tr><td>0</td><td></td></tr></table>	2	0	0		4																																										
0	4																																																											
4																																																												
1	2																																																											
2																																																												
2	0																																																											
0																																																												
6	<table><tr><td>0</td><td>8</td></tr><tr><td>8</td><td></td></tr></table>	0	8	8		<table><tr><td>2</td><td>4</td></tr><tr><td>4</td><td></td></tr></table>	2	4	4		<table><tr><td>4</td><td>0</td></tr><tr><td>0</td><td></td></tr></table>	4	0	0		8																																												
0	8																																																											
8																																																												
2	4																																																											
4																																																												
4	0																																																											
0																																																												
	4	8	0																																																									
	100	30	5																																																									
40	4000	1200	200																																																									
8	800	240	40																																																									
A1	for digits 648																																																											
A1	ft (dep on M1) for correct placement of the decimal point into their final answer		4000+800+1200+240+200+40 Incorrect answer scores maximum 2 marks.																																																									

Paper: 1MA1/1F				
Question	Answer	Mark	Mark scheme	Additional guidance
16	Shown	C1	for angle $ECD = 70$ or for angle $ADB = 70$ and angle $DAB = 40$	May be seen on the diagram
		C1	for a correct relevant reason relating to finding an angle in a triangle, eg • <u>base angles</u> of an <u>isosceles</u> triangle are equal • sum of <u>angles</u> in a <u>triangle</u> is 180	Do not award if an incorrect statement about angles in triangles seen.
		C1	for comparison of angles which would show that EC is parallel to AB , eg • angle $ECD = \text{angle } ABC (= 70)$ • angle $BAD = \text{angle } CED (= 40)$ • angle $BCX = \text{angle } ABC (= 70)$ • angle $AEY = \text{angle } BAD (= 40)$ • angle $ECB = 110$ and angle $ECB + \text{angle } CBA = 180$ • angle $AEC = 140$ and angle $BAD + \text{angle } AEC = 180$ • angle $ECD = \text{angle } ABD (= 70)$ and angle $DAB = \text{angle } DEC (= 40)$	Allow alternative correct labelling of angles eg angle ABD for angle ABC Must be identified in some way, not just angles written on diagram. Angles must be unambiguously identified. Where X is a point on EC extended. Where Y is a point on CE extended.
		C1	for a correct reason relating to angles in parallel lines which would show that EC is parallel to AB , eg • <u>corresponding angles</u> are equal with angle $ECD = \text{angle } ABC (= 70)$ • <u>corresponding angles</u> are equal with angle $BAD = \text{angle } CED (= 40)$ • <u>alternate angles</u> are equal with angle $BCX = \text{angle } ABC (= 70)$ • <u>alternate angles</u> are equal with angle $AEY = \text{angle } BAD (= 40)$ • <u>co-interior angles</u> add to 180 with angle $ECB + \text{angle } CBA = 180$ • <u>co-interior angles</u> add to 180 with angle $BAD + \text{angle } AEC = 180$ • <u>similar triangles</u> with angle $ECD = \text{angle } ABD (= 70)$ and angle $DAB = \text{angle } DEC (= 40)$	Reason must be consistent with their method. If superfluous reasons seen then we need the correct appropriate reason to be linked to the comparison of angles. Incorrect statement(s) seen is maximum 3 marks. Accept allied for co-interior.

Paper: 1MA1/1F				
Question	Answer	Mark	Mark scheme	Additional guidance
17	No, not enough milk (supported)	P1 P1 C1 OR P1 P1 C1	Process to find amount needed (starting from recipe quantities) for a correct process to find amount needed of one ingredient, eg $100 \div 10 \times 15$ oe (= 150) or $200 \div 10 \times 15$ oe (= 300) or $100 \div 2 + 100$ (= 150) or $200 \div 2 + 200$ (= 300) or $40 \div 2 \times 3$ oe (= 60) or $2 \div 2 \times 3$ oe (= 3) or scale factor of 1.5 seen for a correct process to find amount needed of all the ingredients, eg $100 \div 10 \times 15$ oe (= 150) and $200 \div 10 \times 15$ oe (= 300) and $40 \div 10 \times 15$ oe (= 60) and $2 \div 10 \times 15$ oe (= 3) for statement that there is not enough milk with supporting evidence Process to find quantity of pancakes that can be made (working from the quantities of ingredients available) for a correct process to find the number of pancakes that can be made with one ingredient, eg $200 \div 100 \times 10$ oe (= 20) or $250 \div 200 \times 10$ oe (= 12.5) or $70 \div 40 \times 10$ oe (= 17.5) or $5 \div 2 \times 10$ oe (= 25) for a correct process to find the number of pancakes all ingredients could produce eg $200 \div 100 \times 10$ oe (= 20) and $250 \div 200 \times 10$ oe (= 12.5) and $70 \div 40 \times 10$ oe (= 17.5) and $5 \div 2 \times 10$ oe (= 25) for statement that there is not enough milk with supporting evidence	Must have correct figures for all ingredients, but it is not necessary to comment on the other ingredients. Any comment on the other ingredients must be correct. Award this mark for a complete process to find the amount of ingredients for a quantity of pancakes that uses all of one of the ingredients eg process to find amount of ingredients for 20 pancakes (flour). Must have correct figures for all ingredients, but it is not necessary to comment on the other ingredients.

Paper: 1MA1/1F				
Question	Answer	Mark	Mark scheme	Additional guidance
				Any comment on the other ingredients must be correct.
18	$ \begin{array}{r l} 13 & 5 \ 7 \ 8 \\ \hline 14 & 2 \ 4 \ 6 \ 6 \ 7 \ 9 \\ \hline 15 & 0 \ 2 \ 4 \end{array} $ Key: 13 5 = 135 or 130 5 = 135	B2 (B1 B1	for a fully correct ordered diagram for a complete unordered diagram or for an ordered diagram with at most one error or omission) for a correct key (units not required but must be correct if stated) eg. 13 5 or 130 5 represents 135 (cm)	Accept stem of 130, 140, 150 Can be in reverse vertical order (with matching leaves) Errors can be omissions; one number in the wrong position is one error Key must be consistent with the stem
19	6	M1 A1	for a complete factor tree for 54 or 120 with no more than one arithmetic error or for listing at least 4 correct factors (with no more than 1 incorrect) of 54 or 120, could be in factor pairs or for the prime factors of 54 (2, 3, 3, 3) or 120 (2, 2, 2, 3, 5) cao SCB1 for an answer of 2 or 3 or 2×3 if M0 scored	Condone the inclusion of 1 for this mark Factors of 54: 1, 2, 3, 6, 9, 18, 27, 54 Factors of 120: 1, 2, 3, 4, 5, 6, 8, 10, 12, 15, 20, 24, 30, 40, 60, 120 Prime factors may be seen in a diagram eg a Venn diagram

Paper: 1MA1/1F				
Question	Answer	Mark	Mark scheme	Additional guidance
20 (a)	0.4 oe	P1	for $1 - 0.3 - 0.1 (= 0.6)$ or $0.3 + 0.1 + 2x + x = 1$	Award this mark for any two probabilities that sum to 0.6
		P1	for $"0.6" \div 3 (= 0.2)$ or $3x = "0.6"$	Allow P1P1A0 for $P(\text{green}) = 0.4$
			or for $"0.6" \div 3 \times 2$	Award P1P1A0 for 0.4 with incorrect subsequent working eg $\frac{0.4}{0.6}$
		A1	for 0.4 oe	If no answer on answer line then check table
(b)	150	M1	for complete method to find the total number of counters eg $45 \div 0.3$ or $45 \div 3 \times 10$ oe or $45 + 45 \div 3 + 45 \div 3 \times 4 + 45 \div 3 \times 2 (= 45 + 15 + 60 + 30)$	A0 for $\frac{0.4}{1}$
		A1	cao	ft their table
21 (a)	(2), -2, (-4), -4, -2, 2	B2	for all 4 values correct	
		(B1	for 2 or 3 correct values)	
(b)	Graph drawn	B2	for a fully correct graph	Accept a freehand curve drawn that is not made of line segments Curve must not have a horizontal segment between $(-1, -4)$ and $(0, -4)$ Ignore anything drawn outside the required range
		(B1	ft (dep on B1 in (a)) for plotting at least 5 of the points from their table correctly)	
(c)	- 0.5, - 4.25	B1	ft their graph with a single turning point or for x coordinate = - 0.5 and y coordinate = - 4.25 oe	

Paper: 1MA1/1F				
Question	Answer	Mark	Mark scheme	Additional guidance
22 (a)	4.5	P1	for a process to find the number of dark chocolates, eg $280 \times \frac{1}{7}$ oe (= 40)	
		P1	for a process to find one part of the ratio for milk chocolates to white chocolates eg $(280 - \text{"40"}) \div (1 + 3)$ (= 60)	
		P1	for process to find the number of white chocolates, eg $\text{"60"} \times 3$ (= 180) or $280 - \text{"40"} - \text{"60"}$ (= 180)	Condone milk, white incorrectly labelled
		P1	for a ratio of white chocolates : dark chocolates eg $\text{"180"} : \text{"40"}$ oe or for a process to find the value of n eg $\text{"180"} \div \text{"40"}$	Labels not required for this mark, but if seen must be correct Must be a 2-part ratio. Allow $\text{"40"} : \text{"180"}$ if labelled as dark chocolate : white chocolate oe
		A1	(dep P3) for 4.5 oe	A correct answer with no supportive working gets 0 marks Condone answer of 4.5:1
	(b) No with reason	C1	for No with reason Acceptable examples No, the number of dark chocolates and white chocolates has not changed No, the ratio of $n:1$ only involved white and dark chocolates No, eating milk chocolates doesn't change the rest No, the ratio of dark to white chocolates doesn't change. Not acceptable examples Yes,... No, it doesn't matter how many milk chocolates are eaten No, the number of white chocolates doesn't change No, the number of dark chocolates doesn't change	Reason must refer to or imply both dark and white chocolates

Paper: 1MA1/1F				
Question	Answer	Mark	Mark scheme	Additional guidance
23	1.037×10^4	M1 A1 A1	for 570 or 9800 or 0.57×10^3 or 98×10^2 for 10370 oe eg 10.37×10^3 or 103.7×10^2 for 1.037×10^4	
24	12	P1 P1 P1 A1	for (interior angle =) $(180 \div 3) + (360 \div 4)$ (= 150) for (exterior angle =) $180 - "150"$ (= 30) or for "150" = $\frac{(n-2) \times 180}{n}$ oe for $360 \div "30"$ or for a correct process to solve the equation as far as $"30"n = 360$ cao	150 may be seen on diagram. May be seen on diagram Exterior angle of 30 implies P1P1 A correct answer with no supportive working gets 0 marks Minimum supportive working is P1P1 or Trials of interior angle sum Finding $1800 \div 150 = 12$ oe with 12 as answer scores P1P1P1A1

Paper: 1MA1/1F				
Question	Answer	Mark	Mark scheme	Additional guidance
25	$y = -\frac{3}{4}x + 3$	M1 M1 A1	for a correct method to find the gradient of the line, eg $\frac{3-0}{0-4} (= -\frac{3}{4})$ or identifies 3 as the intercept in words or in a partial equation or for $y = [-\frac{3}{4}]x + c$ or for $y - b = [-\frac{3}{4}](x - a)$ where (a, b) is a correct coordinate for $y = -\frac{3}{4}x (+ c)$ oe or for $y = "-\frac{3}{4}"x + 3, m \neq 0$ or $(L =) -\frac{3}{4}x + 3$ or $y - y_1 = -\frac{3}{4}(x - x_1)$ or $y - b = "-\frac{3}{4}"(x - a)$ where (a, b) is a correct coordinate or for an answer of $y = \frac{3}{4}x + 3$ oe for $y = -\frac{3}{4}x + 3$ oe provided the equation in the required form	Just circling 3 is insufficient $[-\frac{3}{4}]$ must be identifiable as their gradient c must be seen either as a letter or a number Allow eg $y = 3 - \frac{3}{4}x$ A correct equation not in the required form scores M1M1A0
26	$\binom{20}{5}$	M1 A1	for $2\binom{7}{4} + 3\binom{2}{-1}$ or $\binom{14}{8}$ and $\binom{6}{-3}$ or $\binom{20}{y}$ or $\binom{x}{5}$ for $\binom{20}{5}$ or $5\binom{4}{1}$	For M1 condone without bracket and/or with fraction line. Correct answer spoilt scores M1A0

Modifications to the mark scheme for Modified Large Print (MLP) papers: 1MA1 1F

Only mark scheme amendments are shown where the enlargement or modification of the paper requires a change in the mark scheme. Notes apply to both MLP papers and Braille papers unless otherwise stated.

The following tolerances should be accepted on marking MLP papers, unless otherwise stated below:

Angles: $\pm 5^\circ$

Measurements of length: ± 5 mm

PAPER: 1MA1_1F			
Question		Modification	Mark scheme notes
1		Letter 'e' changed to 'p'	Standard mark scheme but note the change in letter
6		Wording added: 'Look at the table for Question 6 in the Diagram Booklet.'	Standard mark scheme
7		Wording added: 'Look at the diagram for Question 7 in the Diagram Booklet. It shows an incomplete bar chart.' p changed to pence. Wording added: 'in the Diagram Booklet' Diagram enlarged. Horizontal intermediates added. Braille: wording added 'Drawing film and Bumpons are provided if you wish to use them.'	Standard mark scheme
8	(a)	Wording changed: 'Look at the diagram for Question 8(a) in the Diagram Booklet. It shows...' Wording added: 'in the Diagram Booklet' Diagram enlarged. Braille: wording added 'Drawing film and Bumpons are provided if you wish to use them.'	Standard mark scheme
	(b)	Wording added: 'Look at the diagram for Question 8(b) in the Diagram Booklet. You may be provided with a model. They are not accurate. Diagram 1 and the model show a solid shape. Diagram 2 shows the top view of the solid shape. Diagram 3 shows a side view of the solid shape.' Diagram enlarged. 2D views added. Model provided.	Standard mark scheme
12		Wording changed: 'Look at the diagram for Question 12 in the Diagram Booklet. It shows...' Stafford row removed from the table.	Standard mark scheme
13		Wording changed: 'Look at the diagram for Question 13 in the Diagram Booklet. It shows...' Diagram enlarged. Open headed arrows.	Standard mark scheme
16		Wording changed: 'Look at the diagram for Question 16 in the Diagram Booklet.' Wording added: 'Angle DEC = 40° Angle DBA = 70°' Diagram enlarged. Angles moved outside of angle arcs and angle arcs made smaller.	Standard mark scheme

PAPER: 1MA1_1F		
Question	Modification	Mark scheme notes
17	g changed to grams.	Standard mark scheme
18	Wording added: 'Look at the diagram for Question 18 in the Diagram Booklet. It shows an incomplete stem and leaf diagram.' Wording changed: 'Show this information in the stem and leaf diagram in the Diagram Booklet.' Diagram enlarged.	Standard mark scheme
20	Wording added: Look at the table for Question 20 in the Diagram Booklet.	Standard mark scheme
21	(a) Wording added: 'below'. Wording added: 'There are four spaces to fill.' Braille: Wording added 'by writing the missing values labelled (i) to (iv).' Table turned vertical. (b) Wording added: 'Look at the diagram for Question 21(b) in the Diagram Booklet. It shows a grid.' Diagram enlarged. Open headed arrows. Braille: Wording added 'Drawing film and bumpons are provided if you wish to use them.'	Standard mark scheme
24	Wording added: 'Look at the diagram for Question 24 in the Diagram Booklet.' Diagram enlarged.	Standard mark scheme
25	Wording changed: 'Look at the diagram for Question 25 in the Diagram Booklet. It shows straight line L on a grid.' Diagram enlarged. Open headed arrows.	Standard mark scheme

