

Mark Scheme (Results)

Summer 2024

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.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 2024
Question Paper Log Number P76922A
Publications Code 1MA1_1F_2406_MS
All the material in this publication is copyright
© Pearson Education Ltd 2024

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.

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. 2×6 (=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	18 000	B1	cao			
2	30	B1	cao			
3	reflex	B1	cao			
4	0.03, 0.1, 0.16, 0.2, 0.21	B1	for 0.03, 0.1, 0.16, 0.2, 0.21	accept 0.21, 0.2, 0.16, 0.1, 0.03		
5	8	B1		Accept ±8 or -8		
6	1.5(0)	P1	for $4 \times 1.30 = 5.2(0)$ or $10 - 1.80 = 8.2(0)$	Working could be in pence		
		P1	for 10 – 1.80 – "5.20" (= 3) oe			
		P1	for "3" ÷ 2			
		A1	cao	Condone answer £1.5(0)p		
			SCB2 for answer (£)2.4(0)			

Paper: 1MA	Paper: 1MA1/1F							
Question	Answer	Mark	Mark scheme	Additional guidance				
7	Bar chart			Accept bar chart, vertical line graph, dual/multiple bar chart, composite bar chart, frequency polygon for all marks.				
		M1	for a key, or suitable labels, to identify Lena and Pavel	Accept unambiguous abbreviations for labels eg L, P				
		M1	for 3 or 4 correct labels for days or a linear scale present	Allow linear scale not starting at 0 Scale must be marked on grid lines.				
		M1	for a (bar) chart correctly showing data for at least 1 person or 2 days	Bars / lines / points must be unambiguously correct for their scale (scale must be present).				
				Allow for correctly showing total hours worked for all four days on chart (13, 15, 13, 12)				
		C1	for a fully correct (bar) chart with labels for days of the week, vertical axis correctly scaled and labelled and key/labels for Lena and Pavel	Horizontal axis does not need an overall 'day' label Condone frequency for number of hours. For C mark scale must start at 0 and be linear for the range of values plotted. Condone bars of unequal width Condone no gaps or inconsistent gaps				

Paper: 1MA1/1F							
Question	Answer	Mark	Mark scheme	Additional guidance			
8 (i)	50	M1 A1	for 360 – 220 – 90 oe cao				
(ii)	Reason	C1	for angles at a point add up to 360 Acceptable examples • A full turn adds up to 360 • Full rotation is 360 Not acceptable examples • Angles in a circle add to 360 • A whole circle adds up to 360 • It must add up to 360 degrees • 220 + 90 = 310, 360 - 310 • Angles at a point add up to 180 • Angles on a straight line add to 180	Note: If line AO or OC or BO is extended and used to find x in (i) then allow C1 for angles on a straight line add to 180			

Pape	Paper: 1MA1/1F								
Ques	tion	Answer	Mark	Mark scheme	Additional guidance				
9	(a)	16	B1	cao					
	(b)	19	M1	starts method to find input using inverse operations eg $28 + 10$ (=38) or sight of +10 and $\div 2$	+10 and ÷2 could be seen in a flow diagram Working may be next to number machine.				
			A1	cao	Working may be note to number machine.				
	(c)	Shown	M1	for carrying out at least one trial or for forming a suitable equation, eg $2x - 10 = x$ or for identifying 10	Trial can be for any value, must be correctly evaluated. Accept correct inverse function trial, correctly evaluated. If working seen on the number machine provided in the question allow for a trial other than input 13 or output 28.				
			C1	for showing that an input of 10 gives an output of 10	Allow $10 \times 2 = 20 - 10 = 10$ for M1C1				
10		2:3	M1	for 24 : 36 oe or 3 : 2 or 1.5 : 1					
			A1	2:3 or 1:1.5	Do not ISW from 2:3				
11	(a)	3	B1	cao					
	(b)	32	B1	cao					
	(c)	$30 \div (3+2) - 4$	В1	for brackets correctly placed					

Paper: 1M	Paper: 1MA1/1F							
Question	Answer	Mark	Mark scheme	Additional guidance				
12	6	P1 P1	for process to find perimeter of triangle eg $14 + 30 + 36$ (= 80) for " 80 " $\div 4$ (= 20)	$36 \div 4 + 14 \div 4 + 30 \div 4 (= 20)$ scores				
		P1	for a complete process eg ("20" – 4 – 4) \div 2 or "20" \div 2 – 4	P1P1				
		A1	cao					
13 (a)	1	B1	Allow 100%	Allow $\frac{k}{k}$ Do not accept 100, do not accept certain				
(b)	$\frac{2}{3}$	P1	for start of process to write down proportion of each coin, writes down a correct ratio, eg 1p: 2p = 2: 1 oe or a process to work out number of 1p coins and 2p coins, eg $40 \div 2$ (= 20) and $(40 \div 2) \div 2$ (= 10) or assigns numbers in correct proportion, eg 6 1p coins and 3 2p coins or finding the probability of a 2p coin $\left(=\frac{1}{3}\right)$	Do not accept 100, do not accept certain.				
		A1	for $\frac{2}{3}$ oe	Accept any equivalent fraction, decimal form, 0.66(6) or 0.67 or percentage form, 66(.6)% or 67%				

Paper: 1MA	Paper: 1MA1/1F							
Question	Answer	Mark	Mark scheme	Additional guidance				
14	14742	M1	for complete correct method with relative place value correct eg two lines of 1st method, internal numbers of grids, or complete structure shown of partitioning methods	13650 1092 14742				
				$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				
				200 70 3 50 10000 3500 150 4 800 280 12				
				10000 + 3500 + 150 + 800 + 280 + 12 = 14742				
		M1	(dep on M1) for addition of all the appropriate elements of the calculation					
		A1	cao					

Paper: 1MA1/1F								
Question	Answer	Mark	Mark scheme	Additional guidance				
15 (a)	64	B1	cao					
(b)	36	M1	for identifying 81 and 45 as the key numbers, eg $81 - 45$ or $45 - 81$ or 45 to 81	It is insufficient to identify these on the diagram (eg as 1, 5)				
		A1	cao	Answer of –36 gets M1A0				
(c)	comparison	C1	for a correct comparison of medians that could ft their incorrect median in (a) Acceptable examples The adults were faster because they have the smaller median The adults were [11] minutes faster (on average) The adults were faster The adults took less time The children were slower The children took more time Children took [11] minutes more (on average) Children had a larger median than the adults. Not acceptable examples The children were faster The adults median was 64, the children's median was 75 11 minutes difference The children had more time to run than the adults	Statement must be entirely true and not contradictory Figures not required in comparison, but if seen must be correct. Where [11] is the difference between 75 and their (a). If median in (a) is greater than 75 then converse statements would be correct ft.				

Paper: 1MA1/1F										
Question	Answer	Mark	Mark scheme		Additiona	l guidanc	ee			
16	Pack of 8 (supported)	P1	for a process (for at least 2 packs) of division of price by quantity eg at least 2 of $180 \div 4 (= 45)$ or $320 \div 8 (= 40)$ or $600 \div 12 (= 50)$	Calculation pence	ns could be	e in pound	s or in			
	(заррогеа)	P1	OR any other process that could lead to a comparison of 2 packs eg 180×2 (= 360) or $320 \div 8$ (= 40) and "40" × 12 (= 480) for a complete process to give values that can be used for comparison of all 3 packs eg $180 \div 4$ (= 45) and $320 \div 8$ (= 40) and $600 \div 12$ (= 50) OR $3.20 \div 8$ (= 0.40) and "0.40" × 4 (= 1.60) and "0.40" × 12 (= 4.80) OR 1.80×6 (= 10.80) and 3.20×3 (= 9.60) and 6.00×2 (= 12.00) for 'pack of 8' and correct values that can be used to compare all 3 packs	1 2 4 8 12 16 24 Condone i Pairwise c check to se to be made Assuming Comparis 4 vs 8 4 vs 8 4 vs 12 Correct an working se	omparison ee that this e. Check pr correct fig sons 8 vs 1 4 vs 1 8 vs 1 swer with r cores 0 mar	are possil allows for cocess. ures found 2	r a decision d: Conclusion ossible Yes Ves No			

Paper: 1MA1/1F							
Question	Answer	Mark	Mark scheme	Additional guidance			
17	3.5	M1	for correct expansion of brackets, ie $8x - 10$ or dividing throughout by 2 as a first step to solve equation, eg $4x - 5 = 9$	For M marks step must be carried out not just intention shown. For example, if you see $2(4x - 5) = 18$ $\div 2 \qquad \div 2$ Award M1 for: $4x - 5 = k \text{ with } k \neq 18,36$			
		M1	for isolating terms in <i>x</i> , eg $8x = 18 + 10$ or $4x = 9 + 5$ for 3.5 or $3\frac{1}{2}$ oe or $\frac{7}{2}$ oe	ft their equation of the form $ax \pm b = c$ For example, if you see $8x - 10 = 18$ $+10 + 10$ Award M1 for: $8x = k \text{ with } k \neq 8, 18$			
18	1	B1	cao				
19	Translation	B1	for translation				
	$\begin{pmatrix} 5 \\ -4 \end{pmatrix}$	B1	for $\begin{pmatrix} 5 \\ -4 \end{pmatrix}$ NB: award no marks if more than one transformation is given	Do not accept 5 across, 4 down or 5 right, 4 down. Condone omission of brackets around vector. Do not accept vector given as coordinate.			
20	4 <i>n</i> – 3	B2	for $4n-3$ oe	Accept a different variable eg $4x - 3$ Accept $u_n = 4n - 3$, $T = 4n - 3$ etc			
		(B1	for $4n + k$ where $k \neq -3$ or is absent unambiguously shown)	$n = 4n - 3$ or $4n^{th} - 3$ gets B1 only			

Paper: 1MA1/1F							
Question	Answer	Mark	Mark scheme	Additional guidance			
21 (a)	$2\frac{2}{15}$	M1	for a method to subtract using a common denominator with at least one fraction correct (suitable common denominator for original fractions with at least one correct numerator) eg $\frac{57}{15} - \frac{25}{15}$ or $(3)\frac{12}{15} - (1)\frac{10}{15}$ for $2\frac{2}{15}$ oe eg $\frac{32}{15}$	Use of decimals gets no credit unless it leads to a correct fraction ISW incorrect conversion from improper fraction to mixed number or incorrect simplification of improper fraction.			
(b)	Mistake identified	C1	for explaining that Kevin did not convert to the correct mixed number Acceptable examples In his answer $\frac{9}{24}$ should have been $\frac{11}{24}$ The 9 should be 11 He has not got the numerator right in his final answer He simplified into the mixed number incorrectly He has not put the remainder as the numerator $1\frac{9}{24}$ would give you $\frac{33}{24}$ rather than $\frac{35}{24}$ $\frac{35}{24} = 1\frac{11}{24}$ Not acceptable examples He should have used a common denominator He has not simplified his answer He should have done keep, flip, change He converted the fraction wrongly The answer should be $1\frac{10}{24}$	Figures may be seen in the question space.			

Paper: 1MA1/1F							
Question	Answer	Mark	Mark scheme	Additional guidance			
22 (a)	Yes (supported)	P1	for a process to find the area of one shape, eg $10 \times 8 (= 80)$ or $10 \times 5 (= 50)$ or $8 \times 6 (= 48)$ or $(10-6) \times 5 (= 20)$ or $(10-6) \times (8-5) (= 12)$ or $6 \times (8-5) (= 18)$ or $5 \times 6 (= 30)$	Do not award this mark if they go on to multiply by a third length			
		P1	for a complete process to find the total area, eg "80" – "12" (= 68) or "50" + "18" (= 68) or "48" + "20" (= 68)				
		P1	for a complete process to find the area covered by 3 tins eg $3 \times 2.5 \times 10$ (= 75) or for a complete process to find the number of litres needed eg "68" \div 10 (= 6.8) or [area] \div 10 or for a complete process to find the number of tins needed eg "68" \div 10 \div 2.5 (= 2.72) or [area] \div 10 \div 2.5	[area] is what they believe to be the area			
		A1	for 'Yes' supported by correct figures eg 68 (m²) and 75 (m²) or 6.8 (litres) and 7.5 (litres) or 68 (m²) and 2.72 (tins needed)	Ignore incorrect amount of paint left over if correct figures seen.			
(b)	No effect (supported)	C1	ft from (a) for "has no effect" with reason Acceptable examples No effect, she will need less paint It won't change, she will still have enough No, she will have more paint left over No, as this will cover 82.5m²	Must have a decision in (a). Must include a decision eg yes / no / no effect. If figures included in the statement they must be correct for their [area] in (a).			
			Not acceptable examples Petra will need less paint She will have more paint left over She won't have enough paint She will need more paint				

Paper: 1MA1/1F								
Question	Answer	Mark	Mark scheme	Additional guidance				
23 (a)	10, 11, 13, 14, 16, 17	B1	cao					
(b)	$\frac{5}{9}$	M1	for identification of 10, 12, 14, 15, 18 or for $\frac{a}{9}$ where $1 \le a \le 8$, a an integer, or $\frac{5}{b}$ where $b > 5$, b an integer or for incorrect form, eg 5: 9	Accept any equivalent fraction, decimal				
				form, 0.55(5) or 0.56 or percentage form, 55(.5)% or 56%				

Paper	:: 1MA	1/1F			
Quest		Answer	Mark	Mark scheme	Additional guidance
24	(a)	Estimated value	P1	for using a value rounded to 1sf in a calculation eg $500 \div 10$ or 500×0.8 or 510×0.8 or 513×0.8 or 500×0.81	Their rounded value must be used in a calculation
					Rounding may occur after a correct process, eg $513 \div 10 = 51.3 \approx 50$ and 50×0.81 $513 \div 10 = 51.3 \approx 51$ and 51×0.8 scores P1P1
					Accept 0.81 rounded to 0.80 for this mark Condone 0.81 rounded to 1 for this mark.
			P1	for a full process to find the total amount eg $500 \div 10 \times 0.8$ (= 40) or $510 \div 10 \times 0.8$ (= 40.8) or $500 \div 10 \times 0.81$ (= 40.5) or [distance] $\div 10 \times$ [amount] oe	Where [distance] is their rounded 513 or 513 and [amount] is their rounded 0.81 or 0.81 Accept $513 \div 10 \times 0.81$ for this mark.
			A1	for a correct answer following through their correct rounded value(s)	Do not award this mark if 0.81 is rounded to 1
	(b)	underestimate with reason	C1	ft from (a) eg underestimate as numbers rounded down	Must relate to estimation and not rounding of their final answer and they must have a final answer to part (a)

Paper: 1MA	1/1 F			
Question	Answer	Mark	Mark scheme	Additional guidance
25 (a)	$y = \frac{3}{2}x + 3$	M1	for a correct method to find the gradient of the line, eg $\frac{6-3}{2-0}$ (= $\frac{3}{2}$)	
			or identifies 3 as the intercept in words or in a partial equation	Just circling 3 is insufficient
			$\mathbf{or} \text{ for } y = \left[\frac{3}{2}\right]x + c$	$[\frac{3}{2}]$ must be identifiable as their gradient c must be seen either as a letter or a number
			or for $y - b = \left[\frac{3}{2}\right](x - a)$ where (a, b) is a correct coordinate	
		M1	for $y = \frac{3}{2}x (+ c)$ oe or for $y = \frac{3}{2}x + 3$, $m \ne 0$ or (L =) $\frac{3}{2}x + 3$	Award of this mark implies the first M1
			or $y - y_1 = \frac{3}{2}(x - x_1)$ or $y - b = \frac{3}{2}(x - a)$ where (a, b) is a correct coordinate	
		A1	oe	Any correct equation gets 3 marks
(b)	Equation	B1	for $y = 5x + c$, $c \neq 0$ oe	May be in any equivalent form

Paper: 1MA	1/1F			
Question	Answer	Mark	Mark scheme	Additional guidance
26	7.5	P1	for process to find the number of empty jars eg $3 \div 8 \times 400$ oe (= 150)	
		P1	for start of process to deal with ratios eg 3: 4 and 4: 8 or 3: 4: 8 oe	
		P1	for process to find the number of empty small jars eg $\frac{3}{3+4+8}$ "150" oe (= 30) or 30 : 40 : 80	
		P1	for process to find percentage, eg $\frac{"30"}{400} \times 100$ oe or $\frac{"7.5"}{100}$	
		A1	for 7.5 or $7\frac{1}{2}$ oe	
			OR	
		P1	for start of process to deal with ratios eg 3: 4 and 4: 8 or 3: 4: 8 oe	
		P1	for process to find the proportion of the empty jars that are small eg $\frac{3}{3+4+8}$ (= $\frac{1}{5}$)	
		P1	for process to find the proportion of Kasim's jars that are empty small jars $eg \frac{3}{8} \times "\frac{1}{5}" (= \frac{3}{40})$	
		P1	for process to find percentage, eg " $\frac{3}{40}$ " × 100 oe or $\frac{"7.5"}{100}$	
		A1	for 7.5 or $7\frac{1}{2}$ oe	

Paper: 1MA	1/1F			
Question	Answer	Mark	Mark scheme	Additional guidance
27	400	M1	for $280 \div 0.7$ oe	
28	<i>x</i> ≤ − 4	A1 M1	for a correct first step working with an equation or inequality eg $x + 11 - 11 \le 5 - \frac{1}{2}x - 11$ or $x + 11 + \frac{1}{2}x \le 5 - \frac{1}{2}x + \frac{1}{2}x$ or $2 \times x + 2 \times 11 \le 2 \times 5 - 2 \times \frac{1}{2}x$	Can work with an equation or incorrect inequality symbol for both M marks Allow for subtracting 5 from both sides or subtracting x from both sides. For M marks step must be carried out not just intention shown. For example, if you see $ x + 11 \leq 5 - \frac{1}{2}x $ $ -11 \qquad -11 $ Award M1 for: $ x \leq k - \frac{1}{2}x $ with $k \neq 5$, $k \neq 16$ or indicating $+ \frac{1}{2}x$ reaching $ kx + 11 \leq 5 $ with $k \neq \frac{1}{2}$, $k \neq 1$ or indicating multiplying by 2 obtaining an equation or inequality with three of four terms correct and no term unchanged.
		M1	for a full method to solve the inequality or for a critical value of -4 for $x \le -4$ oe as final answer	Award 2 marks for answer of x ? – 4 where ? is an = or any incorrect inequality symbol, or for answer shown as just – 4

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: ±5°

Measurements of length: ±5 mm

PAPE	R: 1M	IA1_1F	
Ques	stion	Modification	Mark scheme notes
3	(a)	Diagram enlarged. Wording added 'Look at the diagram for Question 3 in the separate Diagram Booklet. The diagram is NOT accurately drawn. The diagram shows an angle labelled y.'	Standard mark scheme
4		Word 'five' added 'Write these five numbers in order of size.'	Standard mark scheme
7		Word 'below' added 'The table below shows the number' The table is turned vertically in the Question Paper. Wording added 'Look at the diagram for Question 7 in the separate Diagram Booklet. The diagram is a grid.' Sentence changed 'On the grid, create a suitable diagram or chart for this information.' For Braille: sentence added 'A spare tactile diagram, sticky labels and bumpons are provided for this question.'	Standard mark scheme
8		Diagram enlarged. Wording added 'Look at the diagram for Question 8 in the separate Diagram Booklet. The diagram is NOT accurately drawn.' The diagram shows three straight lines OA, OB and OC. Angle $AOC = 220^{\circ}$ Angle $AOB = x$ Angle $BOC = 90^{\circ}$	Standard mark scheme
9		Sentence changed 'Look at the number machine below.'	Standard mark scheme
12		Diagram enlarged. Letters added to corners of triangle (ABC) and rectangle (PQRS). Wording added 'Look at the diagram for Question 12 in the separate Diagram Booklet. The diagram is NOT accurately drawn.' The diagram shows a triangle labelled ABC and a rectangle labelled PQRS. In the triangle ABC: AB = 36 cm AC = 30 cm BC = 14 cm In the rectangle PQRS: PQ shows the length of the rectangle. PS = 4 cm'	Standard mark scheme

Question	Mark scheme notes	
15	Wording added 'Look at the diagram for Question 15 in the separate Diagram Booklet. It shows a stem and leaf diagram.' Sentence changed: 'She showed her results in the stem and leaf diagram.'	Standard mark scheme
16	Diagram of batteries removed. Information put in boxes 4 batteries 8 batteries 12 Batteries £1.80 £3.20 £6.00	Standard mark scheme
19	Wording added: Look at the diagram for Question 19 in the separate Diagram Booklet. The diagram shows Triangle A and Triangle B on a coordinate grid. Describe fully the SINGLE transformation that maps Triangle A onto Triangle B. You may be given a cut out triangle for this question.' Labels on triangles changed to 'Triangle A' and 'Triangle B'	Standard mark scheme
22	Diagram enlarged. Letters added to diagram (ABCDEF). Wording added: 'Look at the diagram for Question 22 in the separate Diagram Booklet. The diagram is NOT accurately drawn. The diagram shows a plan of a floor labelled ABCDEF. In the diagram: AB = 10 m BC = 5 m EF = 6 m FA = 8 m	Standard mark scheme
23	Diagram enlarged. Labels changed to 'Set P' and 'Set Q'. Wording added 'Look at the diagram for Question 23 in the separate Diagram Booklet. The diagram shows a Venn diagram with Set P and Set Q.'	Standard mark scheme
25	Diagram enlarged. Wording added 'Look at the diagram for Question 25 in the separate Diagram Booklet. The diagram shows a straight line L drawn on a coordinate grid.'	Standard mark scheme