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Mark Scheme (Results)

November 2014

Pearson Edexcel GCSE
In Mathematics A (1MA0)
Higher (Non-Calculator) Paper 1H

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NOTES ON MARKING PRINCIPLES

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

2 Mark schemes should be applied positively.

3 All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e if the answer matches the mark scheme. Note that in some cases a correct answer alone will not score marks unless supported by working; these situations are made clear in the mark scheme. Examiners should be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.

4 Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.

5 Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

6 Mark schemes will award marks for the quality of written communication (QWC).
The strands are as follows:

i) *ensure that text is legible and that spelling, punctuation and grammar are accurate so that meaning is clear*
Comprehension and meaning is clear by using correct notation and labelling conventions.

ii*) select and use a form and style of writing appropriate to purpose and to complex subject matter*
Reasoning, explanation or argument is correct and appropriately structured to convey mathematical reasoning.

iii) *organise information clearly and coherently, using specialist vocabulary when appropriate*.
The mathematical methods and processes used are coherently and clearly organised and the appropriate mathematical vocabulary used.

With working

If there is a wrong 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.

If working is crossed out and still legible, then it should be given any appropriate marks, as long as it has not been replaced by alternative work.

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, and discuss each of these situations with your Team Leader.

If there is no answer on the answer line then check the working for an obvious answer.

Partial answers shown (usually indicated in the ms by brackets) can be awarded the method mark associated with it (implied).

Any case of suspected misread loses A (and B) marks on that part, but can gain the M marks; transcription errors may also gain some credit. Send any such responses to review for the Team Leader to consider.

If there is a choice of methods shown, then no marks should be awarded, unless the answer on the answer line makes clear the method that has been used.

8 Follow through marks

Follow through marks which involve a single stage calculation can be awarded without working since you can check the answer yourself, 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.

9 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: e.g. incorrect cancelling of a fraction that would otherwise be correct

It is not appropriate to ignore subsequent work when the additional work essentially makes the answer incorrect e.g. algebra.

10 Probability

Probability answers must be given a fractions, percentages or decimals. 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 answer is given on the answer line using both incorrect and correct notation, award the marks.

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

Linear equations

Full marks can be gained if the solution alone is given on the answer line, or otherwise unambiguously indicated 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).

12 Parts of questions

Unless allowed by the mark scheme, the marks allocated to one part of the question CANNOT be awarded in another.

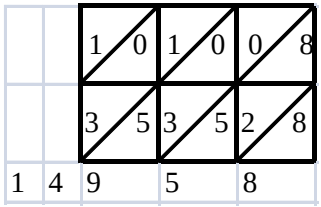
13 Range of answers

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 includes all numbers within the range (e.g 4, 4.1)

14 The detailed notes in the mark scheme, and in practice/training material for examiners, should be taken as precedents over the above notes.

Guidance on the use of codes within this mark scheme
M1 – method mark for appropriate method in the context of the question A1 – accuracy mark B1 – Working mark C1 – communication mark QWC – quality of written communication oe – or equivalent cao – correct answer only ft – follow through sc – special case dep – dependent (on a previous mark or conclusion) indep – independent isw – ignore subsequent working

PAPER: 1MA0_1H					
Question		**Working**	**Answer**	**Mark**	**Notes**
1	(i)		3484	1	B1 cao
	(ii)		34.84	1	B1 cao
	(iii)		670	1	B1 cao
*2			Maths with correct comparative figure(s)	2	M1 for correct method to find figure(s) to compare, eg $\frac{32}{80}\times 100$ (=40) oe **or** 0.38×80 oe (=30.4) C1 for maths with 40% or 30.4 or $\frac{40}{100}$ and $\frac{38}{100}$ oe
3		8 | 4 8 9 9 | 0 0 1 1 2 3 5 7 8 10 | 2 3 6 8 11 | 0 5 8 | 4 represents 84(cm)	correct stem and leaf with key	3	B2 for a fully correct ordered diagram (B1 for a correct unordered diagram or ordered with at most two errors or omissions with stems 8, 9, 10 and 11 present) B1 for a correct key (units not necessary) Accept stem written as 80, 90, etc. but key only if consistent with this
4			$T = 6x + 8y$	3	M1 for $6x$ **or** $8y$ oe **or** T= (a linear expression in x and y) M1 for $6x + 8y$ oe or $T = 6x$ ($+ay$) oe or $T = 8y$ ($+bx$) oe A1 for $T = 6x + 8y$ oe

PAPER: 1MA0_1H					
Question		**Working**	**Answer**	**Mark**	**Notes**
5	(a)		$y > 0.5$	2	M1 for clear intention to subtract 5 from both sides of inequality or equation **or** divide all terms of the inequality or equation by 6 **or** $6y > 3$ **or** 0.5 oe seen A1 for $y > 0.5$ oe as final answer
	(b)		$-3 < x \leq 4$	2	B2 for $-3 < x \leq 4$ oe (B1 for one correct inequality, eg $-3 < x$ **or** $x > -3$ **or** $x \leq 4$ **or** $4 \geq x$ **or** $-3 \leq x < 4$) NB Accept the use of any letter
*6		554 ×27 3878 11080 14958  	Yes with correct working	4	M1 for a complete method with relative place value correct. Condone 1 multiplication error, addition not necessary. M1 (dep) for addition of all the appropriate elements of the calculation. A1 for £149.58 or 42p (spare) C1 ft (dep on M1) for correct decision for their total cost **OR** M1 for a complete grid with not more than 1 multiplication error, addition not necessary M1 (dep) for addition of all the appropriate elements of the calculation A1 for £149.58 or 42p (spare) C1 ft (dep on M1) for correct decision for their total cost **PTO**

					OR M1 for sight of a complete partitioning method, condone 1 multiplication error, addition not necessary. M1 (dep) for addition of all the appropriate elements of the calculation. A1 for £149.58 or 42p (spare) C1 ft (dep on M1) for correct decision for their total cost **OR** M1 for 150.0... ÷ 27 at least 5 seen and 15 carried or $\frac{50}{9}$ M1 (dep) for full correct process to divide 150 by 27 or $5\frac{5}{9}$ A1 for £5.55 or £5.56 o**r** £5.55... C1 ft (dep on M1) for correct decision for their plant cost **OR** M1 for 150.0…÷ 5.54 at least 2 seen and 392 carried M1 (dep) for full correct process to divide 150 by 5.54 A1 for 27 (.07…) C1 ft (dep on M1) for correct decision for their number of plants

500	**50**	**4**	**×**
10 000	1000	80	**2 0**
3500	350	28	**7**

10000
1000
3500
350
80
28
14958

PAPER: 1MA0_1H					
Question		**Working**	**Answer**	**Mark**	**Notes**
7			9	4	M1 for method to find area of one rectangle, eg 15 × 8 (=120) or 15 × 11 (=165) M1 (dep) for subtracting from/by given area, eg (138 – “120”) (=18) or “165” – 138 (=27) M1 for final step from complete method shown, eg 15 − "18"÷ 3 or “27” ÷ 3 A1 cao **OR** M1 for a correct expression for the area of one rectangle, eg (8 + 3) × (15 − x) or 8 × x M1 (dep) for a correct equation eg (8 + 3) × (15 − x) + 8 × x = 138 M1 for correct method to isolate x, eg 3x = 27 A1 cao
*8			x = 130 + correct reasons	4	M1 for angle BFG = 65 may be seen on diagram M1 (dep) for correct method to calculate x, eg (x=) 65 + 65 (=130) **or** (x=) 180 − (180 – 2 × 65) (=130) C2 for x = 130 **and** full appropriate reasons related to method shown (C1 (dep on M1) for any one appropriate reason related to method shown) eg alternate angles; base angles in an isosceles triangle are equal; angles in a triangle add up to 180°; angles on a straight line add up to 180°; exterior angle of triangle = sum of two interior opposite angles; co-interior angles add up to 180° (allied angles) NB Any reasons stated **must** be used

PAPER: 1MA0_1H					
Question		**Working**	**Answer**	**Mark**	**Notes**
9	(a)		2 reasons	2	B2 for two different reasons (B1 for 1 reason) eg No units (of distance) eg Overlapping intervals or boxes or 2 and/or 3 in two boxes eg Missing box (no box for more than 6 (km/miles) or “other” or 4.5 (km/miles))
	(b)		question	2	B1 for a suitable question which includes a time frame (time frame could appear with response boxes) B1 for at least 3 relevant non-overlapping response boxes and exhaustive [Do not allow inequalities in response boxes]
10			construction	2	M1 for a pair of arcs or a single arc, centre *C*, that cut line *AB* **and** at least one pair of arcs not at *C* within guidelines A1 for perpendicular within guidelines with appropriate construction arcs **OR** M1 for an arc, centre *A* radius *AC* **and** an arc centre *B* radius *BC*. The two arcs must intersect below *AB* A1 for perpendicular within guidelines with appropriate construction arcs (SC If M0 scored, B1 for correct perpendicular line within guidelines)
11			900	4	M1 for 0.2 × 7000 (=1400) or 1.2 × 7000 (=8400) oe M1 for 7000 + "1400" − 3000 (=5400) oe M1 for "5400" ÷ 6 A1 cao

PAPER: 1MA0_1H					
Question		**Working**	**Answer**	**Mark**	**Notes**
12	(a)		$e(3e + 5)$	1	B1 for $e(3e + 5)$
	(b)		4	3	M1 for intention to expand brackets, eg $7k - 21$ or division of all terms on RHS by 7 as first step, eg $\frac{3}{7}k - \frac{5}{7}$ M1 for correct method to isolate terms in k in an equation A1 cao
	(c)		$2x^2 - 13x - 24$	2	M1 for 4 terms correct ignoring signs or 3 out of no more than 4 terms correct A1 cao
	(d)		$-\frac{1}{3}$	3	M1 for clear intention to multiply both sides by 4 or split into individual fractions on LHS M1 for correct method to isolate term in f in an equation, ft from equations of form $a + bf = c$, where $a, b, c \neq 0$ A1 cao
13	(a)		$2\times2\times3\times3\times5$	3	M1 for a continual prime factorisation (at least two consecutive steps correct) or at least two stages of a factor tree correct M1 for a fully correct factor tree or list 2,2,3,3,5 A1 for $2\times2\times3\times3\times5$ or $2^2\times3^2\times5$
	(b)		Eg 6, 30	2	M1 for two numbers with an HCF of 6 **or** for two numbers with a LCM a multiple of 15 A1 for two numbers with an HCF of 6 **and** a LCM a multiple of 15 (eg (6, 30), (12, 30), …) **OR** M1 for 2×3 **and** 3×5 **or** for $2\times3\times5$ A1 for two numbers with an HCF of 6 **and** a LCM a multiple of 15 eg (6, 30) (12, 30) …

<table>
<tr><th colspan="6">PAPER: 1MA0_1H</th></tr>
<tr><th colspan="2">Question</th><th>Working</th><th>Answer</th><th>Mark</th><th>Notes</th></tr>
<tr><td>14</td><td></td><td></td><td>25</td><td>4</td><td>M1 for 600 ÷ 4 (=150)
M1 for 4500 ÷ “150” (=30)
M1 for 750 ÷ “30”
A1 for 25 with supporting working

OR
M1 for 4500 ÷ 750 (=6) or 750 ÷ 4500 (= $\frac{1}{6}$)
M1 for 600 ÷ 4 (=150) or 600 ÷ “6” (=100) or 600 × "$\frac{1}{6}$" (=100)
M1 for “150” ÷ “6” or “100” ÷ 4 or 150 × "$\frac{1}{6}$"
A1 for 25 with supporting working

OR
M1 for 4500 ÷ 750 (=6) or 750 ÷ 4500 (= $\frac{1}{6}$)
M1 for $\frac{1}{4} \times \frac{1}{"6"} \left(= \frac{1}{24}\right)$
M1 for "$\frac{1}{24}$" $\times$ 600
A1 for 25 with supporting working</td></tr>
<tr><td>15</td><td>(a)</td><td></td><td>correct box plot</td><td>2</td><td>M1 for a box drawn with at least 2 correct points from LQ, Median and UQ or with maximum value of 290 plotted
A1 for a fully correct box plot</td></tr>
<tr><td></td><td>*(b)</td><td><table><tr><td></td><td>girls</td><td>boys</td></tr><tr><td>Med</td><td>170</td><td>190</td></tr><tr><td>Rang e</td><td>230</td><td>210</td></tr><tr><td>IQR</td><td>120</td><td>100</td></tr></table></td><td>2 comparisons</td><td>2</td><td>C1 for a correct comparison of a measure of spread (using either range or IQR) or ft their box plot
C1 for a correct comparison of medians (accept averages)

For the award of both marks at least one of these comparisons must be in the context of the question.</td></tr>
</table>

PAPER: 1MA0_1H					
Question		**Working**	**Answer**	**Mark**	**Notes**
16	(a)		correct graph	2	M1 for 5 or 6 or 7 points plotted correctly at the ends of the intervals (overlay) A1 cao for correct graph with points joined by curve or straight line segments [SC: B1 if the shape of the graph is correct and 5 or 6 or 7 of their points are **not** at the ends but are plotted consistently within (10,20) (20,30) (30,40) etc.]
	(b)		No with supporting figures	2	M1 for 0.1 × 200 (=20) **or** 0.9×200 (=180) **or** sight of 180 used on cf axis **or** 200 – 186 (=14) A1 ft for correct decision with 20 and “9” **or** 20 and 14 **or** “age” from reading graph at 180 **OR** M1 for method to find percentage of workers who are over 65, eg $\frac{200-"191"}{200} \times 100$ (=4.5%) **or** method to find percentage of workers who are over 60 (from table), eg $\frac{200-186}{200} \times 100$ (=7%) or $\frac{200-190}{200} \times 100$ (=5%) A1 ft for correct decision with “4.5”% or 7% or 5%

PAPER: 1MA0_1H					
Question		**Working**	**Answer**	**Mark**	**Notes**
17			25	4	M1 for complete method to work out interior angle of a regular octagon **or** 135° identified as an interior angle of the octagon M1 for complete method to work out angle *KFG* or angle *KFG* identified as 110° M1 (dep on M2) for complete method to work out angle *KFE*, eg "135" − "110" or (8×"135" − 4×"135" − 4×"110") ÷ 4 or (3×180 − 2×”135” − 2×”110”) ÷ 2 A1 for 25 with supporting working **OR** M1 for complete method to work out the exterior angle of a regular octagon **or** 45° identified as an exterior angle of the octagon M1 for complete method to work out angle *KFG* or angle *KFG* identified as 110° M1 (dep on M2) for complete method to work out angle *KFE*, eg 180 − "45" − "110" A1 for 25 with supporting working **OR** M1 for complete method to work out the exterior angle of a regular octagon **or** 45° identified as an exterior angle of the octagon M1 for complete method to work out angle *JKF* or angle *JKF* identified as 70° M1 (dep on M2) for complete method to work out angle *KFE*, eg "70" − "45" A1 for 25 with supporting working

PAPER: 1MA0_1H					
Question		**Working**	**Answer**	**Mark**	**Notes**
18	(a)		7.5	2	M1 for $\frac{12}{18}$ oe **or** $\frac{18}{12}$ oe **or** $\frac{12}{5}$ oe **or** $\frac{5}{12}$ oe A1 cao
	(b)		45	3	M1 for $\left(\text{"}\frac{3}{2}\text{"}\right)^2$ oe or $\left(\text{"}\frac{2}{3}\text{"}\right)^2$ oe M1 for complete method to find area of shaded region, eg $36 \times \text{"}1.5\text{"}^2 - 36$ A1 cao (SC B2 for 81)
19	(a)		8, (4), (2), 1, 0.8, 0.5	2	B2 all 4 correct Accept $\frac{4}{5}$ in place of 0.8 and $\frac{1}{2}$ in place of 0.5 (B1 for 2 or 3 correct)
	(b)		correct graph	2	M1 (ft dep on B1) for 5 or 6 points plotted correctly from their table (overlay) A1 cao for correct curve drawn from (0.5,8) to (8, 0.5)
20			128π	5	M1 for $\frac{4\pi r^2}{2} = 32\pi$ oe A1 for (r =) 4 M1 for $2\times\pi\times\text{"}4\text{"}\times10$ (=80π) **or** $\pi\times\text{"}4\text{"}^2$ (=16π) or ft their r M1 for 32π + "80π" + "16π" oe or 402.1 −402.3 or ft their r A1 cao
21		$3-\sqrt{2}+3\sqrt{2}-\sqrt{2}\sqrt{2}$	$1+2\sqrt{2}$	2	M1 for 4 terms correct ignoring signs or 3 out of no more than 4 terms correct A1 cao

PAPER: 1MA0_1H					
Question		**Working**	**Answer**	**Mark**	**Notes**
22	(a)		1	1	B1 cao
	(b)		$\frac{5y}{8x^3}$	2	M1 for correct square root or correct use of reciprocal eg $\frac{8x^3}{5y}$ **or** $\frac{25y^2}{64x^6}$ A1 for $\frac{5y}{8x^3}$ **or** $\frac{5}{8}yx^{-3}$ oe
	(c)		$\frac{x+27}{(x-3)(x+3)}$	3	M1 for denominator $(x-3)(x+3)$ **or** x^2-9 M1 for $\frac{5(x+3)}{(x-3)(x+3)}$ oe **or** $\frac{4(x-3)}{(x-3)(x+3)}$ oe (NB The denominator must be $(x-3)(x+3)$ or x^2-9 **or** another suitable common denominator) A1 for $\frac{x+27}{(x-3)(x+3)}$ **or** $\frac{x+27}{x^2-9}$

PAPER: 1MA0_1H					
Question		**Working**	**Answer**	**Mark**	**Notes**
23			$\frac{156}{336}$	4	**Method 1 (Combinations for odd T)** M1 for one probability for odd *T*, eg P(2,3,4) = $\frac{1}{8}\times\frac{2}{7}\times\frac{1}{6}$ or P(2,4,5) = $\frac{1}{8}\times\frac{1}{7}\times\frac{4}{6}$ or P(3,3,5) = $\frac{2}{8}\times\frac{1}{7}\times\frac{4}{6}$ or P(3,5,5) = $\frac{2}{8}\times\frac{4}{7}\times\frac{3}{6}$ or P(5,5,5) = $\frac{4}{8}\times\frac{3}{7}\times\frac{2}{6}$ M1 for adding at least two probabilities for odd *T*, eg $\frac{1}{8}\times\frac{2}{7}\times\frac{1}{6}+\frac{1}{8}\times\frac{1}{7}\times\frac{4}{6}$ or $3\left(\frac{2}{8}\times\frac{1}{7}\times\frac{4}{6}\right)$ M1 for completely correct method, ie $6\left(\frac{1}{8}\times\frac{2}{7}\times\frac{1}{6}\right)+6\left(\frac{1}{8}\times\frac{1}{7}\times\frac{4}{6}\right)+3\left(\frac{2}{8}\times\frac{1}{7}\times\frac{4}{6}\right)+3\left(\frac{2}{8}\times\frac{4}{7}\times\frac{3}{6}\right)+\left(\frac{4}{8}\times\frac{3}{7}\times\frac{2}{6}\right)$ oe A1 for $\frac{156}{336}$ oe, eg $\frac{13}{28}$ or 0.46(4…) **OR** **Method 2 (Combinations for even T)** M1 for one probability for even *T*, eg P(3,4,5) = $\frac{2}{8}\times\frac{1}{7}\times\frac{4}{6}$ or P(2,3,3) = $\frac{1}{8}\times\frac{2}{7}\times\frac{1}{6}$ or P(2,5,5) = $\frac{1}{8}\times\frac{4}{7}\times\frac{3}{6}$ or P(2,3,5) = $\frac{1}{8}\times\frac{2}{7}\times\frac{4}{6}$ or P(4,5,5) = $\frac{1}{8}\times\frac{4}{7}\times\frac{3}{6}$ or P(3,3,4) = $\frac{2}{8}\times\frac{1}{7}\times\frac{1}{6}$ M1 for adding at least two probabilities for even *T*, eg $\frac{2}{8}\times\frac{1}{7}\times\frac{4}{6}+\frac{1}{8}\times\frac{2}{7}\times\frac{1}{6}$ or $3\left(\frac{1}{8}\times\frac{2}{7}\times\frac{1}{6}\right)$ M1 for completely correct method, ie $1-[6\left(\frac{2}{8}\times\frac{1}{7}\times\frac{4}{6}\right)+3\left(\frac{1}{8}\times\frac{2}{7}\times\frac{1}{6}\right)+3\left(\frac{1}{8}\times\frac{4}{7}\times\frac{3}{6}\right)+6\left(\frac{1}{8}\times\frac{2}{7}\times\frac{4}{6}\right)+3\left(\frac{1}{8}\times\frac{4}{7}\times\frac{3}{6}\right)+3\left(\frac{2}{8}\times\frac{1}{7}\times\frac{1}{6}\right)$ oe A1 for $\frac{156}{336}$ oe, eg $\frac{13}{28}$ or 0.46(4…) **PTO**

					Method 3 (Combinations of odd and even numbers- odd totals) M1 for one probability for odd T, eg P(E,E,O) =. $\frac{2}{8}\times\frac{1}{7}\times\frac{6}{6}$ or P(O,O,O) = $\frac{6}{8}\times\frac{5}{7}\times\frac{4}{6}$ M1for adding at least two probabilities for odd *T*, eg 3 $\left(\frac{2}{8}\times\frac{1}{7}\times\frac{6}{6}\right)$ or $\left(\frac{2}{8}\times\frac{1}{7}\times\frac{6}{6}\right)$ + $\left(\frac{6}{8}\times\frac{5}{7}\times\frac{4}{6}\right)$ M1 for completely correct method, ie 3 $\left(\frac{2}{8}\times\frac{1}{7}\times\frac{6}{6}\right)$ + $\left(\frac{6}{8}\times\frac{5}{7}\times\frac{4}{6}\right)$ A1 for $\frac{156}{336}$ oe, eg $\frac{13}{28}$ or 0.46(4…) **OR** **Method 4 (combinations of odd and even numbers- even totals)** M1 for probability for even T, ie = $\frac{2}{8}\times\frac{6}{7}\times\frac{5}{6}$ M1 for adding at least two probabilities for even *T*, eg 3 $\left(\frac{2}{8}\times\frac{6}{7}\times\frac{5}{6}\right)$ M1 for completely correct method, ie $1-3\left(\frac{2}{8}\times\frac{6}{7}\times\frac{5}{6}\right)$ A1 for $\frac{156}{336}$ oe, eg $\frac{13}{28}$ or 0.46(4…) **SC (with replacement)** For example, M0 M1 for adding at least two probabilities for odd or even *T*, eg P(E,E,O) = $\frac{2}{8}\times\frac{2}{8}\times\frac{6}{8}$ or P(O,O,O) = $\frac{6}{8}\times\frac{6}{8}\times\frac{6}{8}$ M1 for completely correct method, eg 3 $\left(\frac{2}{8}\times\frac{2}{8}\times\frac{6}{8}\right)$ + $\left(\frac{6}{8}\times\frac{6}{8}\times\frac{6}{8}\right)$ or $\frac{288}{512}$ oe, eg $\frac{9}{16}$ or 0.56(25) A0

PAPER: 1MA0_1H					
Question		**Working**	**Answer**	**Mark**	**Notes**
*24		$2y = 3x - 4$ $y = \frac{3}{2}x - 2$; $m = \frac{3}{2}$ $\frac{3 - -1}{1 - 4} = -\frac{4}{3}$ $\frac{3}{2} \times -\frac{4}{3} = -2$	No with reason	4	M1 for $\frac{3}{2}$ oe or $y = \frac{3}{2}x\left(-\frac{4}{2}\right)$ oe M1 for method to find gradient of *AB*, eg $\frac{3 - -1}{1 - 4}$ **or** $\frac{-1 - 3}{4 - 1}$ **or** $-\frac{4}{3}$ oe A1 for identifying gradients as $\frac{3}{2}$ oe **and** $-\frac{4}{3}$ oe C1 (dep on M1) for a conclusion with a correct reason, eg No as product of $\frac{3}{2}$ and $-\frac{4}{3}$ is not −1, ft from their two gradients
25	(i)		(3, −1)	3	B1 cao
	(ii)		(1.5, −4)		B1 for (1.5, −4) accept 1.5 or $1\frac{1}{2}$ or $\frac{3}{2}$ for *x* coordinate
	(iii)		(−3, −4)		B1 cao

Modifications to the mark scheme for Modified Large Print (MLP) papers.

Only mark scheme amendments are shown where the enlargement or modification of the paper requires a change in the mark scheme.

The following tolerances should be accepted on marking MLP papers, unless otherwise stated below:
Angles: ±5°
Measurements of length: ±5 mm

PAPER: 1MA0_1H			
Question		**Modification**	**Notes**
3		Stem and leaf diagram – extra line put in at the bottom	
5		Larger gaps between numbers	
10		Line AB put horizontal Small vertical line at either end of line AB	
12	(c)	*x* changed to *y*	
15	(b)	Table changed 50, 250, 175, 100, 225 Box plots labeled – Box plot (a) and Box plot (b) and both extended to 400 with a 2 cm grid Lines moved to 25, 125, 200, 225, 250	
16		Table changed to 20, 70, 140, 170, 185, 195, 200 Grid 1½ cm for 10 on y axis (this one gives 10 people over 60): x axis is 3cm for 10 years. Age (years) 90 column removed	
18		Shading reversed – AEFG is shaded Question wording altered to reflect this	

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