Mark Scheme (Results)

Summer 2017

Pearson Edexcel Level 1 Award
In Number and Measure (ANM10)
Paper 1A + 1B

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Contents

NOTES ON MARKING PRINCIPLES

1   Types of mark
M marks: method marks
A marks: accuracy marks
B marks: unconditional accuracy marks (independent of M marks)

2   Abbreviations

cao – correct answer only	ft – follow through
isw – ignore subsequent working	SC: special case
oe – or equivalent (and appropriate)	dep – dependent
indep - independent	

3   No working
If no working is shown then correct answers normally score full marks
If no working is shown then incorrect (even though nearly correct) answers score no marks.

4   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If working is crossed out and still legible, then it should be given any appropriate marks, as long as it has not been replaced by alternative work.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.
Any case of suspected misread loses A (and B) marks on that part, but can gain the M marks. Discuss each of these situations with your Team Leader.
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.

5   **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.

6   **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.
Transcription errors occur when candidates present a correct answer in working, and write it incorrectly on the answer line; mark the correct answer.

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

8   **Use of ranges for answers**
If an answer is within a range this is inclusive, unless otherwise stated.

Section A

PAPER: ANM10/1A					
Question		Working	Answer	Mark	Notes
1	(a)		5 or 10	1	B1 for 5 or 10 or both 5 & 10
	(b)		18	1	B1 cao
	(c)		5 or 13	1	B1 for 5 or 13 or both 5 & 13
	(d)		9 and 13	1	B1 for 9 and 13 in either order
2	(a)		82.96	1	B1
	(b)		15.6	1	B1
	(c)		12.389	1	B1
	(d)		14	1	B1 cao
	(e)		Four hundred and twenty eight	1	B1cao
	(f)		0.4(0)	1	B1

Question		Working	Answer	Mark	Notes
3	(a)		84	1	B1 cao
	(b)		Arrow pointing at 267	1	B1 cao
4	(a)		Monday	1	B1 allow Mon/M
	(b)		24th July	2	M1 for attempt to count back 2 weeks or 14 days from the 7th August including using 30th July incorrectly (ie omitting 31st July) or for 23 July or for an incorrect day or month with correct date A1 24th July oe
5			34	2	M1 for $\dfrac{4}{100} \times 850$ oe e.g. 0.04×850 or $4 \times 8.5(0)$ or for 884 or 816 given as an answer A1 cao
6			4.06	4	M1 for attempt to work out one of $2 \times 59p$ (=118(p)) or $3 \times 27p$ (=81(p)) oe M1 for adding the 3 items or 5.94 seen as a total M1 for method to subtract their total from £10 A1 cao SC B2 for 5.19 or fully correct method for 1 of each item, B1 for 4.81 or correct method to find the total cost of 1 of each item

PAPER ANM10/1A					
Question		Working	Answer	Mark	Notes
7	(a)		Numbers in correct order	1	B1 for −4, −3, −1, 0, 2, 3
	(b)		4	1	B1 cao
	(c)		−3	1	B1 cao
8	(a)		4 15 pm	2	B2 for fully correct time that incorporates pm e.g. 4 15 pm or in 24 hour format e.g. 16 15 or quarter past four in the afternoon (B1 for incomplete time e.g. 4 15 or quarter past 4 or 4 15 am or 04 15 or quarter past four in the morning/in the night)
	(b)		3 hours 25 minutes	2	M1 for 205 ÷ 60 (= 3.416… or answer of 3 hours 41/2 mins) or a correct method to count up in 60s up to 180 A1 for 3 hours 25 minutes
9	(a)		7	1	B1 for 6.8 to 7.2
	(b)		35	1	B1 for 33 to 37

PAPER: ANM10/1A				
Question	Working	Answer	Mark	Notes
10		96	3	M1 for splitting shape into two or more rectangles or for filling the shape in to make one big rectangle or for establishing one of the missing sides is 9 or 6 M1 for attempt to correctly find the area of one rectangle e.g. 4×15 or 10×6 or 4×9 or 6×6 or 10×15 (this mark does not imply the previous M1 unless a fully correct method is shown, eg $4 \times 15 + 6 \times 6$) A1 cao
11 (a)		Barney & Fred	1	B1 cao for Barney & Fred (accept B & F)
(b)		Alice	1	B1 cao for Alice or A
(c)		Craig	1	B1 cao for Craig or C

PAPER: ANM10/1A					
Question	Working	Answer	Mark	Notes	
12 (a)	3 km 450 m 6 km 100 m 2 km 650 m + 1 km 700 m – 6 km 100 m **Or** 3450 + 2650 – 1700	4 km 400 m	2	M1 for method to show 3 + 2 – 1 or 450 + 650 – 700 or 3.45(0) + 2.65(0) – 1.7(00) or a total including 400 m or for intention to subtract 1 km 700 m from their total with decomposition to allow subtraction of 7 or 4.4 or 4400 A1 for 4 km 400 m or 4400 m or 4.4(00) km **Or** M1 for writing all measurements in m and intention to add 3450 and 2650 or sight of total of 6100 or intention to subtract 1700 from their total with decomposition to allow subtraction of 7 or a total of 4400 or 4.4(00) A1 for 4 km 400 m or 4400 m or 4.4(00) km SCB1 for 7800 m or 7 km 800 m or 7.8(00) km	
(b)		2300	1	B1 cao	
(c)		54	1	B1 cao	

PAPER ANM10/1A				
Question	**Working**	**Answer**	**Mark**	**Notes**
13		3840	2	M1 for 20 × 12 × 16 oe A1 cao
14 (a)		5	1	B1 cao
(b)		Comedy & Sci-fi	1	B1 cao
(c)		29	2	M1 for method to show 6 + 7 + 4 + 5 + 7 allow one error in a list of 5 numbers or all 5 correct with one extra number A1 cao
15		£46.38	4	M1 for 4671 – 4512 (= 159) M1 for "159" × 22p (= 3498) oe ie their number of units × 22p M1 dep on 2nd M1 for adding their cost of units and monthly charge A1 for £46.38 or 4638p **Or** M1 for 4671 × 22p (= £1027.62) or 4512 × 22p (= £992.64) M1 for "1027.62" – "£ 992.64" M1 dep on 1st M1 for adding their cost of units and monthly charge (46.38 or 4638) A1 for £46.38 or 4638p

Section B

Question		Working	Answer	Mark	Notes	
1	(a)	3816 56 _109_ +	3981	2	M1 for attempt to add all three numbers may be evidenced by 1 in unit column of answer and a carry figure of 2 to the tens column or addition with one error only but must be working right to left A1 cao	
	(b)	763 _8_ × 61$_5$0$_2$4	6104	2	M1 for 24 written with a 4 in the units column and a 2 carried to the 10's column or a correct multiplication with one error only or correct multiplications for box method condoning one multiplication error or attempt to add 8 lots of 763 A1 cao	
		8 × 700 = 5600 8 × 60 = 480 8 × 3 = _24_ + 6104				
	(c)	6$\overline{)21_36}$	36	2	M1 for method to show intention to divide 216 by 6, e.g. setting up a division sum or showing 216 ÷ 6 A1 cao	

For part (b) box method:

7	6	3	×
5 ╱ 6	4 ╱ 8	2 ╱ 4	8
6 1	0	4	

PAPER: ANM10/1B					
Question		**Working**	**Answer**	**Mark**	**Notes**
1	(d)	20.00 <u>13.72</u> – 6.28	6.28	2	M1 for correct method shown, e.g.for correctly putting numbers in column with attempt to subtract, e.g. indicated by 8 in hundredths column or adding on method with at least .28 correct A1 cao
2	(a)		Correct order	1	B1 for 74, 185, 457, 745, 816
	(b)		Correct order	1	B1 for 0.78, 4.02, 4.19, 4.2, 4.7, 7.3
	(c)		Correct order	1	B1 for 7, 17, 45, 67, 83
3	(a)		6	1	B1 cao
	(b)		63	1	B1 cao
	(c)		24 000	1	B1 cao
	(d)		800	1	B1 cao

Question		Working	Answer	Mark	Notes
PAPER: ANM10/1B					
4	(a)		$\dfrac{1}{4}$	1	B1 cao
	(b)		$\dfrac{3}{5}$ & $\dfrac{12}{20}$	1	B1 cao
	(c)		$\dfrac{4}{5}$	1	B1 cao
	(d)		0.75	1	B1 cao
5	(a)		$\dfrac{3}{11}$	1	B1 oe
	(b)		63	2	M1 for $\dfrac{30}{100} \times 210$ oe, eg 21×3 or for answer of 147 or 273 A1 cao

PAPER: ANM10/1B					
Question		Working	Answer	Mark	Notes
6			C or 50p	1	B1 cao
7	(a)		46	2	M1 for using 60 mins in an hour evidenced by sight of 20 mins or 26 mins as part of a time calculation but not 40 + 26 A1 cao
	(b)		07 25	1	B1 cao
8			36	2	M1 for 11 + 7 + 11 + 7 oe A1 cao
9	(a)		litres	1	B1 allow *l* m*l* c*l*
	(b)		Inches	1	B1 allow in feet/foot