

# Mark Scheme (Results)

# January 2017

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



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#### 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
isw – ignore subsequent working
oe – or equivalent (and appropriate)
indep - independent

ft – follow through SC: special case dep – dependent

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If working is crossed out and still legible, then it should be given any appropriate marks, as long as it has not been replaced by alternative work.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

PAPER A	PAPER ANM10/1A							
Ques	tion	Working	Answer	Mark	Notes			
1	(a)		85.94	1	B1 accept $\frac{4297}{50}$ oe			
	(b)		3.6	1	B1 accept $\frac{18}{5}$ oe			
	(c)		3.42	1	B1 accept $\frac{171}{50}$ oe			
2	(a)		201	1	B1 cao			
	(b)(i)		g or mg	2	B1 cao accept Grams or Milligrams			
	(ii)		ml or cl		B1 cao accept Millilitres or Centilitres			
3	(a)		Monday	1	B1 accept M or Mon			
	(b)		11 April	2	M1 for counting on to 31 <sup>st</sup> March or for attempt to add on 3 weeks or 21 days or an answer of 12 <sup>th</sup> April or 11 <sup>th</sup> or 11 <sup>th</sup> March A1 (Tuesday) 11 <sup>th</sup> April			
4	(a)		500	1	B1 cao			
	(b)		0.4	1	B1 cao			
	(c)		250	2	M1 450 ÷ 9 (=50) or 450 × 5 (=2250) or $\frac{5}{9}$ × 450 oe, eg 5 × 50			
					A1 cao			
	(d)		105	2	M1 for $\frac{20}{100} \times 525$ oe			
					A1 cao			

# Section A

PAPER ANM10/1A	PAPER ANM10/1A					
Question	Working	Answer	Mark	Notes		
5		11.97	3	M1 for $4 \times 1.45$ (=5.8) or $2 \times 0.79$ (=1.58) M1 for all of $4 \times 1.45$ (= 5.8) and $2 \times 0.79$ (=1.58) and $4.59$ or digits 1197 A1 for 11.97 Or M1 for $4 \times 145$ (=580) or $2 \times 79$ (=158) M1 for all of $4 \times 145$ (=580) and $2 \times 79$ (=158) and 459 or digits 1197 A1 for 11.97 SCB2 for 6.83		
6 (a)		A quarter to five marked correctly.	2	B1for long hand shown at 9 B1 for short hand between 4 and 5 exclusive (professional judgement required)		
(b)	22 10 20 25 Or 20 25 to 21 00 is 35 min 21 00 to 22 00 is 1 hour 22 00 to 22 10 is 10 min Or 20 25 to 21 25 is 1 hour 21 25 to 22 00 is 35 mins 22 00 to 22 10 is 10 mins	1 hour 45 minutes	2	M1 for attempt to subtract 20 25 from 22 10 using 60 mins in an hour A1 cao accept 105 minutes [NB: an answer of 1.45 or 105 gains M1] or M1 for attempt to add on from 20 25 to 21 00 evidenced by sight of 35 minutes (from correct working) or 20 25 to 21 25 or sight of 1 hour (from correct working) or 22 00 to 22 10 or sight of 10 min or sight of 45 minutes A1 cao accept 105 minutes [NB: an answer of 1.45 or 105 gains M1]		

Question	Working	Answer	Mark	Notes
7 (a)		137	1	B1 cao
(b)		524 marked correctly	1	B1 cao
8 (a)		125	1	B1 for 123 to 127
(b)		Correct line	1	B1 for line of length of 11 cm +/-2mm (professional judgement required)
9 (a)		Correct bar chart	3	<ul><li>B1 for clearly labelled bars</li><li>B2 for 5 column heights correct</li><li>(B1 for 3 column heights correct)</li></ul>
(b)		Black	1	B1 cao or ft
(c)		28	2	M1 for method to show $4 + 8 + 3 + 6 + 7$ or ft heights of bars added A1 cao or ft from heights of bars added
10		1584	2	$ \begin{array}{c} M1 \text{ for } 16 \times 11 \times 9 \\ A1 \text{ cao} \end{array} $
11		97.25	3	M1 for intention to find one area e.g. $4 \times 17$ (=68) or 6.5 × 4.5 (= 29.25) oe M1 for complete method e.g $4 \times 17 + 6.5 \times 4.5$ oe A1 cao

PAPER A	PAPER ANM10/1A						
Ques	tion	Working	Answer	Mark	Notes		
12	(a)		A multiple of 18	1	B1 for one of 18, 36, 54, etc		
	(b)		A common factor of 24 & 64	1	B1 for one of: 1, 2, 4, 8		
	(c)		13	1	B1 cao		
13			36p or £0.36	3	M1 for 855 ÷ 24 or 8.55 ÷ 24 A1 for digits 35625 or 3562 or 356 35 or 36 or 0.35 or 0.36 B1 36p or £0.36		
14	(a)		5	1	B1 cao		
	(b)		63	1	B1 cao		
	(c)	$\frac{3 \text{ m } 62 \text{ cm}}{5 \text{ m } 57 \text{ cm}} + \frac{9 \text{ m } 19 \text{ cm}}{1 \text{ m } 35 \text{ cm}} -$ 9 m 19 cm $\mathbf{Or}$ 362 + 557 - 135	7 m 84 cm	2	M1 for method to show $3 + 5 - 1 (= 7)$ or 62 + 57 - 35 (= 84) or for $3.62 + 5.57$ or sight of a total of 9.19 (or 9 m 19 cm) or for intention to subtract 1 m 35 cm from their total with decomposition to allow subtraction of 3 or for digits 784 A1 for 7 m 84 cm or 784 cm or 7.84 m SCB1 for 10 m 54 cm <b>Or</b> M1 for writing all measurements in cm or intention to add 362 and 557 or sight of total of 919 or intention to subtract 135 from their total with decomposition to allow subtraction of 3 or for digits 784 A1 for 7 m 84 cm or 784 cm or 7.84 m SCB1 for 1054 cm		

PAPER ANN	PAPER ANM10/1B						
Question	n	Working	Answer	Mark	Notes		
14	(a)		5	1	B1 cao		
	(b)		63	1	B1 cao		
	(c)	$\frac{3 \text{ m } 62 \text{ cm}}{5 \text{ m } 57 \text{ cm}} + \frac{9 \text{ m } 19 \text{ cm}}{1 \text{ m } 35 \text{ cm}} - \frac{9 \text{ m } 19 \text{ cm}}{362 + 557 - 135}$	7 m 84 cm	2	M1 for method to show $3 + 5 - 1$ (= 7) or 62 + 57 - 35 (= 84) or for $3.62 + 5.57$ or sight of a total of 9.19 (or 9 m 19 cm) or for intention to subtract 1 m 35 cm from their total with decomposition to allow subtraction of 3 or for digits 784 A1 for 7 m 84 cm or 784 cm or 7.84 m SCB1 for 10 m 54 cm Or M1 for writing all measurements in cm or intention to add 362 and 557 or sight of total of 919 or intention to subtract 135 from their total with decomposition to allow subtraction of 3 or for digits 784 A1 for 7 m 84 cm or 784 cm or 7.84 m SCB1 for 1054 cm		
15			£86.62	3	M1 for $823 - 762 (= 61)$ or for $823 \times 1.42 (=1168.66)$ or for 762 × 1.42 (=1082.04) M1 for "61" × 1.42 (=86.62) (or digits 8662) or for 823×1.42-762×1.42 (1168.66 - 1082.04) A1 for £86.62 or 8662p (must have unit of money)		

# Section B

PAPER ANM10/1 Question	Working	Answer	Mark	Notes
1 (a)	$ \begin{array}{r}                                     $	2591	2	M1 for attempt to add all three numbers may be evidenced by 1 in unit column of answer or at least 2 correct additions of numbers in correct columns A1 cao
(b)	9.30 <u>4.64</u> <u>6</u>	4.66	2	M1 for an attempt to decompose in order to subtract 4 from 10 can be awarded for sight of a 0 in the hundredths column or 6 in the hundredths column as part of answer A1 cao
(c)	$\frac{47}{7)32^49}$ 534	47	2	M1 for $32 \div 7$ with 4 tens and a carry of 4 shown with the 9 or correct method to subtract 7 at least 10 times or to subtract 70 at least 3 times A1 cao
(d)	$534 \\ \underline{6} \times \\ 32_{2}0_{2}4 \\ \hline 5 & 3 & 4 & \times \\ 3 & 1 & 2 & 4 \\ \hline 3 & 1 & 2 & 4 \\ \hline 3 & 0 & 8 & 4 & 6 \\ \hline 32 & 0 & 4 & \\ \hline 6 \times 500 = 3000 \\ 6 \times 30 = 180 \\ \underline{6 \times 4 = 24} \\ 3204 \\ \hline \end{cases}$	3204	2	M1 for $4 \times 6$ or sight of 24 or correct multiplications for box method condoning one multiplication error or attempt to add 6 lots of 534 A1 cao

PAPER ANM10/1	APER ANM10/1B						
Question	Working	Answer	Mark	Notes			
2 (a)		7	1	B1 oe			
		$\frac{7}{11}$					
(b)(i)		$\frac{3}{16}$	2	B1 cao			
(b)(ii)		$\frac{2}{8}$ and $\frac{1}{4}$		B1 cao			
3 (a)		79 000	1	B1 cao			
(b)		6	1	B1 cao			
(c)		785	1	B1 cao			
4 (a)		Correct order	1	B1 for 4, 11, 38, 83, 101			
(b)		Correct order	1	B1 for 7, 10, 45, 69, 96			
(c)(i)		2.67 or 2.77	2	B1 for 2.67 or 2.77			
(ii)		2.77 or 2.67		B1 for 2.77 or 2.67 but not a repeat of (i)			

PAPER ANM10/1	PAPER ANM10/1B							
Question	Working	Answer	Mark	Notes				
5 (a)		-3, -2, -1 correctly placed	1	B1 numbers correctly placed without ambiguity				
(b)		-4	1	B1 cao				
(c)		2	1	B1 cao accept +2				
6 (a)		$\frac{9}{16}$	1	B1 for $\frac{9}{16}$ oe				
(b)		$\frac{2}{5}$	1	B1 for $\frac{2}{5}$				
(c)		75	1	B1 cao				
(d)		$\frac{3}{10}$	1	B1 oe fraction				
7		C or £60	1	B1 cao				
8 (i)		28	4	M1 for 9 + 5 + 9 + 5 oe or 9 + 5 A1 cao				
(ii)		45		M1 for 9 × 5 oe A1 cao SCB1 for (i) 45 and (ii) 28,				

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