

Mark Scheme (Results)

Summer 2018

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

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.

ft – follow through

SC: special case

dep – dependent

If working is crossed out and still legible, then it should be given any appropriate marks, as long as it has not been replaced by alternative work.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 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			
Ques	tion	Working	Answer	Mark	Notes
1	(a)		27	1	B1 cao
	(b)		3, 7 or 19	1	B1 for any one (or more than one) correct prime
	(c)		7	1	B1 cao
2	(a)	$\frac{3 \text{kg } 400 \text{g}}{4 \text{kg } 650 \text{g} +} \frac{2 \text{kg } 450 \text{g}}{5 \text{kg } 50 \text{g}} -$ $\frac{3 \text{kg } 50 \text{g}}{5 \text{kg } 600 \text{g}} -$ or $3.4 + 4.65 - 2.45$ or $3400 + 4650 - 2450$	5 kg 600 g or 5.6 kg or 5600 g	2	M1 for showing $3 + 4 - 2$ (=5) or $400 + 650 - 450$ (=600) or showing a subtraction of 2 kg 450 g from their total with decomposition to allow subtraction of 450g from 50g or for an answer of 5 600 Or M1 for writing all measurements in kg and showing the addition of 3.4(00) and $4.65(0)$ or showing a subtraction of $2.45(0)$ from their total or for an answer of $5.6(00)$ Or M1 for writing all measurements in g and showing the addition of 3400 and 4650 or showing subtraction of 2450 from their total or for an answer of 5600 A1 for 5 kg 600 g or $5.6(00)$ kg or 5600 g SCB1 for an answer of 10 kg 500 g or 10.5 kg or 10500 g
	(b)		74	1	B1 cao accept 74.0(0)

PAPER:	PAPER: ANM10/1A						
Ques	tion	Working	Answer	Mark	Notes		
3	(a)		32.06	1	B1 cao		
	(b)		86.4	1	B1 cao		
	(c)		5.28	1	B1 cao		
4		$3 \times 3.65 = 10.95$ $4 \times 0.35 = 1.40$ $1 \times 2.49 = 2.49$ 14.84 $20 - 14.84 = 5.16$	5.16	4	M1 for method to work out one of $3 \times 3.65 (10.95)$ or $4 \times 35p$ (=140(p)) or for 20 – (one of 2.49, 3×3.65 , 4×0.35) M1 for $3 \times 3.65 + 4 \times 0.35 + 2.49$ oe or 14.84 seen as a total or for 20 – (two of 2.49, 3×3.65 , 4×0.35) M1 for subtracting their total from 20 A1 cao SC B2 for 13.51 SC B1 for 6.49		
5	(a) (b)		Monday (Monday) 22(nd) January (2018)	1 2	B1 cao allow M/Mon/Monday M1 for stating that back 1 week is the 29th January or for an answer of 21st January or 22nd of any month other than January A1 (Monday) 22(nd) January (2018) or 22/01/(2018) oe		

PAPER:	PAPER: ANM10/1A						
Ques	tion	Working	Answer	Mark	Notes		
6	(a)		0.8	1	B1 cao		
	(b)	$(720 \div 8) \times 3$	270	2	M1 for $\frac{3}{8} \times 540$ or $720 \div 8 (= 90)$ or $3 \times 720 (=2160)$ A1 cao		
	(c)	0.3 × 540 oe	162	2	M1 for 0.3 × 540 oe or for an answer of 540 + 162 (=702) or 540 - 162 (=378) A1 cao		
	(d)		600	1	B1 cao		
	(e)		6.5	1	B1 cao		
7			9 weeks 2 days	2	M1 for $65 \div 7$ or 9.2857 or 9 or $9 \times 7 + 2$ or $63 + 2$		
					A1 cao		
8	(a)		64	1	B1 cao		
	(b)		301	2	M1 for at least two of 72, 89, 140 out of no more than 4 figures used or for all 3 used with no more than 2 others used [others must be from the table] A1 cao		

PAPER:	ANM10/	1A			
Ques	tion	Working	Answer	Mark	Notes
9	(a)		Correct graph	3	B1 for labels written on horizontal axis (allow initials, or shortened form for vehicle types)B2 for 5 column heights correct(B1 for 3 or 4 column heights correct)
	(b)		Car	1	B1ft
10	(a) (b)		Quarter to two marked correctly 07 30	2	 M1 for long hand shown at 9 or for short hand between 1 and 2 (exclusive) A1 for long hand shown at 9 and short hand between 1 and 2 (exclusive) SC B1 for hands of equal length or hands the wrong way round M1 for method to add on 75 mins (using 60 minutes in an hour) or sight of 1 hr 15 mins or an answer of 7.30 pm or 1930 A1 for 7 30 or 7.30 am or half past seven oe
11	(a)		Java	1	B1 cao
	(b)		Nankin	1	B1 cao
	(c)		Orpington & Java	1	B1 cao
12		$12 \times 4 \times 5$	240	2	M1 for $12 \times 4 \times 5$ A1 cao

PAPER: A	NM10/	1A			
Questi	on	Working	Answer	Mark	Notes
13		$3.40 \div 24 = 0.14166$	14	2	M1 for $3.40 \div 24$ (=0.1416) or $340 \div 24$ (= 14.16) or both $14 \times 24 = 336$ and $15 \times 24 = 360$ or for an answer of 0.14 A1 cao
14		$(3 \times 10) + (3 \times 4) = 30 + 12 = 42$ Or $(7 \times 10) - (4 \times 7) = 70 - 28$	42	3	M1 for 3×10 (=30) or 3×4 (=12) or 10×7 (=70) or 4×7 (=28) M1 for a fully correct method to find the area of the shape A1 cao
15		(140 - 120) × 10p + (550 - 400) × 5p + 19.99	29.49	4	M1 for $140 - 120 (= 20)$ or $550 - 400 (= 150)$ oe eg $140 \times 10p - 120 \times 10p$ M1 for "20" × $10(p)(=200p)$ or "150" × $5(p)(=750p)$ or $140 \times 10(p)$ or $550 \times 5(p)$ oe [NB: (£)2 or $200(p)$ or (£)7.50 or $750(p)$ implies M2] M1 for "20" × $10p + "150" \times 5p + 1999$ or "20" × $0.1 + "150" \times 0.05 + 19.99$ [NB: compatible units for their values from a correct method] A1 for 29.49 SC B2 digits 6149

Section B

PAPER: ANN	PAPER: ANM10/1B					
Question	Working	Answer	Mark	Notes		
1 (a) 5176 213 $\frac{38}{5427}$ +	5427	2	M1 putting all numbers in correct columns (may be 2 sums) and evidence of method to add all three numbers may be evidenced by 7 in units column of answer with a carry of 1 into the tens column or for addition of all 3 numbers with just one error A1 cao		
(b	$\begin{array}{c} 953 \\ \underline{5} \\ 47_{2}6_{1}5 \end{array}$	4765	2	M1 for complete structured method to multiply by 5, condone one error – made by a multiplication error or error from 'carry' figures or correct multiplications for box method condoning one multiplication error (without adding) or method to add 5 lots of $953 - 5$ lots of 953 in column and at least a start to the addition, maybe indicated by a 5 in the units column of the answer or addition of all 5 numbers with just one error		
(c	$5 \times 900 = 4500 \\ 5 \times 50 = 250 \\ \underline{5 \times 3} = 15 \\ 4765 + 4765$	47	2	A1 cao M1 e.g. $28 \div 6$ with 4 shown and a carry of 4 with the 2 or for division with just one error or chunking method with one error only (eg showing $10 \times 6 = 60$ and		
				10 + 10 + 10 + 10 + 7) or continued addition of 6 with just one error A1 cao		

PAPER:	ANM10/	1B			
Ques	tion	Working	Answer	Mark	Notes
2			C or £4.80	1	B1 cao
3	(a)		56	1	B1 cao
	(b)		73 000	1	B1 cao
	(c)		Six hundred and twelve	1	B1 condone incorrect spelling as long as meaning is clear
	(d)		8 tenths	1	B1 $\frac{8}{10}$ or tenths
4	(a)		8	1	B1 allow answers from 7.8 – 8.2
	(b)		Correct angle drawn	1	B1 angle drawn within guidelines; need not be drawn at <i>X</i>
5	(a)		3	1	B1 cao
	(b)		-2	1	B1 cao
6	(a)	0.5, 0.59, 0.6, 0.61, 0.67	Correct order	1	B1 cao
	(b)	7%, 11%, 19%, 28%, 36%	Correct order	1	B1 (condone missing %)
	(c)	69p, £2.25, £3.07, 370p, 482p	Correct order	1	B1 (condone missing units)

PAPER:	PAPER: ANM10/1B						
Ques	tion	Working	Answer	Mark	Notes		
7	(a)(i)		grams	1	B1 grams or G or g		
	(ii)		litres	1	B1 centilitres, litres or millilitres (allow <i>l</i> , <i>cl</i> , <i>ml</i>)		
	(b)		miles	1	B1 cao		
8	(a)		$\frac{70}{100}$	1	B1 $\frac{7}{10}, \frac{700}{1000}$, etc		
	(b)		$\frac{2}{3}$	1	B1 cao		
	(c)		$\frac{5}{7}$	1	B1 oe,e.g. $\frac{10}{14}, \frac{35}{49}$		
	(d)(i)		$\frac{3}{5}$	1	B1 cao		
	(ii)		$\frac{1}{5}$ (and) $\frac{2}{10}$	1	B1 cao		
9	(a)		87	1	B1 cao		
	(b)		66	1	B1 cao		

PAPER: ANM10/1B						
Question	Working	Answer	Mark	Notes		
10	11 + 5 + 11 + 5	32	2	M1 for a correct method to find perimeter or for 11 + 5 (=16) A1 cao		

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