

Mark Scheme (Results)

January 2023

Pearson Edexcel Awards
In Number and Measure (ANM10) Paper 1A

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If working is crossed out and still legible, then it should be given any appropriate marks, as long as it has not been replaced by alternative work.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

PAI	PAPER: ANM10 1A						
Q	uestion	Working	Answer	Mark	Notes		
1	(a)		54.61	1	B1 accept $\frac{5461}{100}$		
	(b)		2394	1	B1 cao		
	(c)		623	1	B1 cao		
2	(a)		0.15	1	B1 cao		
	(b)		314	2	M1 for $\frac{2}{5} \times 785$ or $0.4 \times 785$ oe or for $2 \times 785$ (=1570) or $785 \div 5$ (=157) or $1570 \div 5$ A1 cao		
	(c)		287	2	M1 for 0.35 × 820 oe e.g. 82 + 82 + 82 + 41 or 82 × 3 + 8.2 ×5 etc or 1007 or 533  A1 cao		
3			2.35 pm or 14 35	2	B2 for fully correct time that incorporates pm eg 2.35 pm or 14 35 or 'twenty five to three in the afternoon' oe  (B1 for 2 35am or 2 35 or 2 XX pm or X 35 pm or 14 XX or XX 35 that is a time in the afternoon in 24 hour format eg 13 35)		

PAPE	PAPER: ANM10_1A						
Ques	stion	Working	Answer	Mark	Notes		
4	(a)		5 kg 847 g or 5.847 kg or 5847 g	2	M1 for 3 + 4 - 2 (=5) or 572 + 690 - 415 (=847) or a total including 5 kg or showing a subtraction of 2 kg 415 g from their total or for an answer of 5 847 A1 for 5 kg 847 g or 5.847 kg or 5847 g  or  M1 for writing all measurements in g and 3572 + 4690 (=8262) or 3572 - 2415 (=1157) or 4690 - 2415 (=2275) or 5847  A1 for 5 kg 847 g or 5.847 kg or 5847 g  or  M1 for writing all measurements in kg and 3.572 + 4.690 (=8.262) or 3.572 - 2.415 (=1.157) or 4.690 - 2.415 (=2.275) or 5.487  A1 for 5 kg 847 g or 5.847 kg or 5847 g  (SCB1 for 10 kg 677 g or 10.677 kg or 10 677 g)		
	(b)		730	1	B1 cao		
	(c)		8000	1	B1 cao		
5			11 (weeks) 3 (days)	2	M1 for $80 \div 7$ (=11.4(285)) or for an answer including 11 or for counting up in 7s to at least 77 with at most 1 error A1 cao		

Question		Working	Answer	Mark	Notes
6	(a)		Tuesday	1	B1 accept Tue or other shortened form of Tuesday
	(b)		26 April	2	B2 for (Monday) 26 April (2021) oe e.g. 26/4
					(B1 for filling in table with 30 (and no 31) for Friday before 1 May or 26 of any month or 27 April oe eg 27/4)
7		$3 \times 2.75 = 8.25$ $2 \times 3.20 = 6.40$ $4 \times 0.70 = 2.80$ $17.45$	2.55	4	M1 3 × 2.75 (=8.25) or 3 × 275 (=825) or 2 × 3.2(=6.4(0)) or 2 × 320 (=640) or 4 × 0.70 (=2.8(0)) or 4 × 70 (=280) or for 20 – (one of "8.25" or "6.40" or "2.80") or 11.75 or 13.60 or 17.20
		20 - 17.45 = 2.55			M1 for adding all 3 items or a total of 17.45 or for 20 – (two of "8.25" or "6.40" or "2.80") or 5.35 or 8.95 or 10.8(0) (must have consistent units for this mark)
					M1 for subtracting their total from 20 (must have consistent units for this mark)
					A1 cao (SCB2 for 13.35 SCB1 for 6.65)
8			1400	2	M1 for $20 \times 7 \times 10$ oe e.g. $200 \times 7$
					A1 cao
9	(a)		Arrow pointing to 287	1	B1 cao
	(b)		946	1	B1 cao

Question		Working	Answer	Mark	Notes
10	(a)		7	1	B1 cao
	(b)		108	3	M1ft for a correct area: $16 \times 5$ (=80) or "7" $\times$ 4 (=28) or $9 \times 4$ (=36) or $16 \times (5+4)$ (=144) M1ft for a fully correct method to find area of shape e.g. $16 \times 5 + $ "7" $\times$ 4 or $16 \times (5+4) - 9 \times 4$ oe A1ft allow the total of $80 + 4 \times (a)$
11			48	2	M1 for $381 \div 8$ (= 47.(625)) or $3.81 \div 8$ (=0.47(625)) or for an answer of 47 or 0.47 or 0.48 A1 cao
12	(a)		(0)9 39	1	B1 cao
	(b)		(0)8 57	1	B1 cao
	(c)		15	2	M1 for showing a method to find the number of minutes from 08 48 to 09 03 A1
13	(a)		Walking	1	B1 allow w oe
	(b)		cycling, running	1	B1 allow c, r oe
	(c)		5	1	B1 cao
14	(a)		$\frac{10}{19}$	1	B1 cao
	(b)		0.9	1	B1 allow 0.9(00000)

Question Working		Answer	Mark	Notes	
15	(a)	<u> </u>	2	1	B1 cao
	(b)		17.25	1	B1 cao
	(c)		75.9(0)	2	M1 for 1.15 × 66 or 57.50 + 11.50 + 5.75 + 1.15 or 57.50 + 11.50 + 3 × 2.30 or 50 + 10 + 5 + 1 or 50 + 10 + 3 × 2 oe A1
16			162.22	4	M1 for 9503 – 8647 (= 856) [look in table]  M1 for "856" × 0.17 (=145.52) or "856" × 17 (=14552) or [units] × 0.17 or [units] × 17  M1 for "145.52" + 16.70 or "14552" + 1670 or [units] × 0.17 + 16.70 or [units] × 17 + 1670 (units must be compatible)  A1  Or  M1 for 9503 × 0.17 (=1615.51) or 9503 × 17 (=161 551) or 8647 × 0.17(=1469.99) or 8647 × 17 (=146 999)  M1 for 9503 × 0.17 – 8647 × 0.17 or 9503 × 17 – 8647 × 17  M1 for "145.52" + 16.70 or "14552" + 1670 (units must be compatible)  A1  SCB1 for 3085.5(0) or SCB2 for 3102.2(0)