



Mark Scheme (Results)

Summer 2019

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

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If working is crossed out and still legible, then it should be given any appropriate marks, as long as it has not been replaced by alternative work.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

Section A

| PAPER: ANM10/1A | | | | |
|------------------------|----------------|------------------|-------------|--------------|
| Question | Working | Answer | Mark | Notes |
| 1 (a) | | A1 | 1 | B1 cao |
| (b) | | Boilers & Brille | 1 | B1 cao |
| (c) | | Dalong | 1 | B1 cao |
| 2 (a) | | 23.85 | 1 | B1 oe |
| (b) | | 28.7 | 1 | B1 oe |
| (c) | | 13.7 | 1 | B1 oe |

| PAPER: ANM10/1A | | | | |
|-----------------|---|----------------|------|---|
| Question | Working | Answer | Mark | Notes |
| 3 (a) | | 3 mins 55 secs | 2 | M1 for $235 \div 60 (=3.9(166\dots))$ or counting up in 60's to 180 or an answer of 3 minutes x seconds where $x \neq 55$ A1 cao |
| (b) | | 260 | 1 | B1 cao |
| (c) | $\begin{array}{r} 3 \text{ km } 780 \text{ m} \quad 7 \text{ km } 900 \text{ m} \\ \underline{4 \text{ km } 120 \text{ m}} + \quad \underline{2 \text{ km } 350 \text{ m}} \\ 7 \text{ km } 900 \text{ m} \quad 5 \text{ km } 550 \text{ m} \end{array}$ <p>Or $3780 + 4120 - 2350$</p> <p>Or $3.78(0) + 4.12(0) - 2.35(0)$</p> | 5 km 550 m | 2 | <p>M1 for method to show $3 + 4 - 2 (=5)$ or a total including 5 km or $780 + 120 - 350 (550)$ or a total including 550 m or for intention to subtract 2 km 350 m from their total or a correct amount with correct units in incorrect form eg 4 km 1550 m or for the correct figures with no units eg 5 550 A1 for 5 km 550 m or 5550 m or 5.55(0) km</p> <p>Or M1 for writing all measurements in m and $3780 + 4120 (=7900)$ or $3780 - 2350 (=1430)$ or $4120 - 2350 (=1770)$ or for the correct figures with no units eg 5550 A1 for 5 km 550 m or 5550 m or 5.55(0) km</p> <p>Or M1 for writing all measurements in km and $3.78(0) + 4.12(0) (=7.9(00))$ or $3.78(0) - 2.35(0) (=1.43(0))$ or $4.12(0) - 2.35(0) (=1.77(0))$ or for the correct figures with no units eg 5.55(0) A1 for 5 km 550 m or 5550 m or 5.55(0) km</p> <p>(SCB1 for 10 km 250 m or 10250 m or 10.25(0) km)</p> |

| PAPER: ANM10/1A | | | | |
|-----------------|---------------|--------|------|---|
| Question | Working | Answer | Mark | Notes |
| 4 | | 7.23 | 4 | <p>M1 for working out one of $2 \times 95 (=190)$ or $2 \times 0.95 (= 1.9(0))$ or $3 \times 249 (= 747)$ or $3 \times 2.49 (= 7.47)$ or $20 - (\text{one of } 3.40, 2 \times 0.95, 3 \times 2.49)$ or $16.6(0)$ or $18.1(0)$ or 12.53</p> <p>M1 for adding the 3 total costs with consistent units or 12.77 seen or $20 - (\text{two of } 3.40, 2 \times 0.95, 3 \times 2.49)$ or $14.7(0)$ or 9.13 or 10.63</p> <p>M1 for subtracting their total of the 3 items from £20 (must be consistent units)</p> <p>A1 cao</p> <p>(SC B2 for 13.16 (SC B1 for 6.84))</p> |
| 5 | | 108 | 2 | <p>M1 for $9 \times 4 \times 3$ or e.g. $36 \times 3, 9 \times 12$</p> <p>A1 cao</p> |
| 6 | $11 + 14 + 8$ | 33 | 2 | <p>M1 for 2 or 3 out of no more than 3 correct distances listed</p> <p>A1 cao</p> |
| 7 | | 35 | 3 | <p>M1 for $2.09 \div 6$ or $209 \div 6$</p> <p>A1 for digits 34(8333...) or for 0.35</p> <p>B1 ft for rounding correctly</p> |

| PAPER: ANM10/1A | | | | |
|-----------------|---------|------------------------------|------|--|
| Question | Working | Answer | Mark | Notes |
| 8 | | Correct bar chart | 3 | B2 for 5 correct bars (can be different widths, in any order) (B1 for 3 correct bars or for 5 correct heights but incomplete bars) B1 for clear labels for bars |
| 9 | | 112 | 3 | M1 for one area e.g. $6 \times 12 (=72)$ or $8 \times 5 (=40)$ or $8 \times 11 (=88)$ or $11 \times 12 (=132)$ or $4 \times 5 (=20)$ M1 for complete method e.g. $6 \times 12 + 5 \times 8$ or $12 \times 11 - 5 \times 4$ oe A1 cao |
| 10 | | 2.12 | 2 | M1 for $567 - 355$ or $5.67 - 3.55$ or -2.12 or showing all steps to add on from 355 to 567 or 3.55 to 5.67 A1 |
| 11 | (a) | 519 | 1 | B1 cao |
| | (b) | 380 | 1 | B1 cao |
| | (c) | 8 | 1 | B1 cao |
| | (d) | 1,2,5 or 10 | 1 | B1 for a common factor of 30 and 50 e.g. one or more from 1, 2, 5, 10. If more than one, they must all be correct. |
| | (e) | 15,30,etc | 1 | B1 for one multiple of 15, e.g. 15, 30, 45, 60,etc If there is more than one answer they must all be correct. |
| 12 | (a) | 8 | 1 | B1 allow 7.8 – 8.2 |
| | (b) | Angle of 75° drawn | 1 | B1 for angle of $73^\circ - 77^\circ$ |

| PAPER: ANM10/1A | | | | | |
|-----------------|-----|---------|------------------|------|---|
| Question | | Working | Answer | Mark | Notes |
| 13 | (a) | | $\frac{80}{100}$ | 1 | B1 for e.g. $\frac{80}{100}, \frac{40}{50}, \frac{20}{25},$ oe |
| | (b) | | 0.4 | 1 | B1 cao |
| | (c) | | 36 | 2 | M1 for 0.3×120 oe eg $3 \times 12, 30 \times 1.2$ or 156 or 84 A1 |
| | (d) | | 42 | 2 | M1 for $3 \times 70 (=210)$ or $70 \div 5 (=14)$ oe A1 cao |
| 14 | (a) | | Wednesday | 1 | B1 for Wednesday or Wed(s) or W |
| | (b) | | 10th September | 2 | M1 for counting on to 31st August and no 32nd (can be marked on calendar) or for clearly adding on 3 weeks or 21 days or for 11 September. A1 (Tuesday) 10 September (2019) or 10/09/(2019) oe |
| 15 | | | £70.99 | 4 | M1 for $147 \times 17 (=2499)$ or $147 \times 0.17 (=24.99)$ M1 for $325 \times 12 (=3900)$ or $325 \times 0.12 (=39.00)$ M1 for $147 \times 17 + 325 \times 12 + 700$ oe eg “24.99” + “39” + 7 (must be compatible units) or for 70.99 or 7099 A1 £70.99 or 7099p (ie must include units) |

Section B

| PAPER: ANM10/B | | | | | |
|----------------|-----|--|---------------------------------|------|--|
| Question | | Working | Answer | Mark | Notes |
| 1 | (a) | | Twenty past 9 correctly marked. | 2 | B1 for long hand shown at 4 B1 for shorter hand shown between 9 and 10 with hand nearer to 9 than 10 (accept if hand points to 9) (SC B1 for correctly pointing hands of equal length or hand length swapped) |
| | (b) | | 3 hours 50 mins | 2 | M1 ft for subtracting 09 20 from 13 10 using 60 mins in an hour or for an answer including 3 hours or 50 minutes A1 accept 230 minutes |
| 2 | (a) | $\begin{array}{r} 2842 \\ 69 \\ \underline{731} + \end{array}$ | 3642 | 2 | M1 for adding all three numbers (correctly aligned) may be evidenced by 2 in unit column of answer and a carry figure of 1 to the tens column or addition with one error only or for 3 out of the 4 figures of 3642 correct A1 cao |
| | (b) | $\begin{array}{r} 8.40 \\ \underline{2.53} - \end{array}$ | 5.87 | 2 | M1 for correctly putting numbers in columns with evidence of decomposition to subtract the 3 hundredths in 2.53 - may be indicated by 7 in hundredths column or for an answer including .87 or for an adding on method showing all stages for their method A1 cao |
| | (c) | $\begin{array}{r} 139 \\ 6 \overline{)8^2 3^5 4} \end{array}$ | 139 | 2 | M1 for $8 \div 6$ shown with a 1 and a carry of 2 or division with just one error or correct method to subtract 6 at least 10 times or to subtract 60 oe A1 cao |

| PAPER: ANM10/B | | | | | |
|----------------|-----|---------|-----------------------------|------|---|
| Question | | Working | Answer | Mark | Notes |
| 3 | (a) | | $\frac{9}{10}$ | 1 | B1 cao |
| | (b) | | $\frac{3}{5}, \frac{9}{15}$ | 1 | B1 either order |
| | (c) | | $\frac{1}{10}$ | 1 | B1 $\frac{1}{10}, \frac{10}{100}$ oe |
| | (d) | | $\frac{4}{5}$ | 1 | B1 cao |
| 4 | | | D or £4 | 1 | B1 |
| 5 | (a) | | 580 | 1 | B1 cao |
| | (b) | | Arrow pointing at 316 | 1 | B1 cao (arrow pointing at 3rd mark after 310) |
| 6 | (a) | | litres | 1 | B1 for litres(or <i>l</i>) or centilitres(or <i>cl</i>) or millilitres or (<i>ml</i>) |
| | (b) | | pounds | 1 | B1 for stones(or <i>st</i>) and/or pounds(or <i>lb</i>) or ounces(or <i>oz</i>) |
| 7 | (a) | | 76 000 | 1 | B1 cao |
| | (b) | | 49 | 1 | B1 cao |
| | (c) | | 9 | 1 | B1 cao |

| PAPER: ANM10/B | | | | | |
|----------------|-----|---------|---------------|------|---|
| Question | | Working | Answer | Mark | Notes |
| 8 | (a) | | -5 | 1 | B1 cao |
| | (b) | | 1 | 1 | B1 for 1 or +1 |
| 9 | (a) | | Correct order | 1 | B1 for 9%, 17%, 49%, 56%, 63% (with or without %) |
| | (b) | | Correct order | 1 | B1 for 4.09, 4.17, 4.68, 4.7, 5.9 |
| 10 | (a) | | 27 | 2 | M1 for 3×9 or clear counting of squares that leads to their area A1 cao |
| | (b) | | 24 | 2 | M1 for $3 + "9" + 3 + "9$ "oe or $3 + "9"$ (=12) (ft incorrect counting of length – length must be clearly seen as "9" or used clearly in a calculation) A1 cao SCB1 for answers of (a) 24 and (b) 27 |

