

UNIT 1: NON-CALCULATOR, FOUNDATION TIER
GENERAL INSTRUCTIONS for MARKING GCSE Mathematics - Numeracy

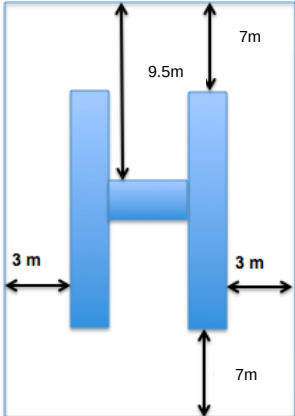
1. The mark scheme should be applied precisely and no departure made from it. Marks should be awarded directly as indicated and no further subdivision made.
2. Marking Abbreviations
 The following may be used in marking schemes or in the marking of scripts to indicate reasons for the marks awarded.
 cao = correct answer only
 MR = misread
 PA = premature approximation
 bod = benefit of doubt
 oe = or equivalent
 si = seen or implied
 ISW = ignore subsequent working

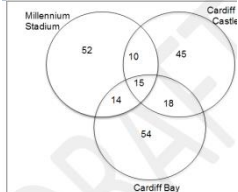
 F.T. = follow through (✓ indicates correct working following an error and ✗ indicates a further error has been made)

 Anything given in brackets in the marking scheme is expected but, not required, to gain credit.
3. Premature Approximation
 A candidate who approximates prematurely and then proceeds correctly to a final answer loses 1 mark as directed by the Principal Examiner.
4. Misreads
 When the data of a question is misread in such a way as not to alter the aim or difficulty of a question, follow through the working and allot marks for the candidates' answers as on the scheme using the new data.
 This is only applicable if a wrong value, is used consistently throughout a solution; if the correct value appears anywhere, the solution is not classed as MR (but may, of course, still earn other marks).
5. Marking codes
 - 'M' marks are awarded for any correct method applied to appropriate working, even though a numerical error may be involved. Once earned they cannot be lost.
 - 'm' marks are dependant method marks. They are only given if the relevant previous 'M' mark has been earned.
 - 'A' marks are given for a numerically correct stage, for a correct result or for an answer lying within a specified range. They are only given if the relevant M/m mark has been earned either explicitly or by inference from the correct answer.
 - 'B' marks are independent of method and are usually awarded for an accurate result or statement.
 - 'S' marks are awarded for strategy
 - 'E' marks are awarded for explanation
 - 'U' marks are awarded for units
 - 'P' marks are awarded for plotting points
 - 'C' marks are awarded for drawing curves

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GCSE Mathematics – Numeracy Unit 1: Foundation Tier	Mark	Comment
1. (a) 6 (b) Appropriate key For correct pictogram drawn (c) (i) 19 (ii) 16	B1 B1 B3 B1 B1 7	B2 for 3 or 4 drawn correctly B1 for 2 drawn correctly F.T their key
2. (a) £315 (b) (Salma=) $800 \times 2(p) + 500 \times 5(p)$ OR (Dafydd $600 \times 2(p) + 700 \times 5(p)$) $1600(p) + 2500(p)$ or (£)16 + (£)25 OR $1200(p) + 3500(p)$ or (£)12 + (£)35 (Salma=) 4100p or £41 (Dafydd=) 4700p or £47 Salma – <i>Contracts Ceiriog</i> AND Dafydd – <i>Banana Phones</i>	B1 M1 A1 A1 A1 A1 A1 7	F.T. provided if at least M1 A1 awarded
3.(a) 230×20 or $230 \times 10 \times 2$ or equivalent method based on multiplication (£)4600 (b) Indicates $\times 2$ or double or add total for 20 twice (£)9200 (c) Tables cost ($10 \times 150 =$ £) 1500 Budget for chairs $3100 - 10 \times 150$ Budget for chairs (£) 1600 Attempt to find out how many 49(.50)s or 50s in 1600, e.g. $1600 \div 50$, $1600/49(.50)$, $49(.50) + 49(.50) + \dots$, two for £100 32 (chairs) Budget left over $1600 - 32 \times 49(.50)$ or $32 \times 50(p)$ or $32 \times (\pounds 0).5(0)$ (£)16 Organisation and communication Accuracy of writing	M1 A1 M1 A1 B1 M1 A1 M1 A1 M1 A1 OC1 W1 13	FT 'their 4600' FT 'their derived 1500'

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4. (a)(i) 60 metres (ii) 10×20 $200 \text{ (m}^2\text{)}$ (b) 	B1 M1 A1 B1 B1 B1 B1 7	Equal values for 'their 3s' and 'their 7s' Both 3s Both 7s 9.5 or FT 'their 7' + 2.5 evaluated
5. Lines of length 6.5cm AND 5cm. Angle of turn 37° 1090 metres or equivalent	B1 B1 B2 4	Allow $\pm 2\text{mm}$ and $\pm 2^\circ$. F.T. 'their length from start' $\times 100$. Correct units must be given. B1 for correct length without units. B1 for length only <u>with incorrect units</u> (e.g. 10.9cm or 11cm).
6.(a) (i) 9:00 a.m. (ii) 12:30 p.m. (iii) A (b)(i) States or implies NO with a reason, e.g. 'No, the slope is the same from 8am to 9am' (ii) States or implies NO with a reason, e.g. 'No, the graph shows a further distance away from home between 12 noon and 1 p.m.'	B1 B1 B1 E1 E1 5	
7. (Laura's share) $= \frac{1}{2} \times \frac{3}{4} \times (\text{£})8000$ (£)3000 Conclusion, '£200 profit'	M2 A1 B1 4	Award M1 for sight of $\frac{1}{2} \times \frac{3}{4}$ or $\frac{3}{8}$ FT conclusion provided at least M1 awarded
8. 08:55 train from Chester chosen. Attempt to find time difference between 10:35 and 08:55 $= 1(\text{hr}) 40 (\text{min})$ or $100(\text{min})$ (So total time $\Rightarrow$) $2(\text{hr}) 5 (\text{min})$ or equivalent.	B1 M1 A1 B1 4	May be implied in further work. F.T. for 'their chosen train' (Other trains take 2hr 3m, 1hr 24m, 1hr 59m) F.T. time for 'their train journey' + 25min. <i>Alternative method</i> (Arrives at Holyhead station) 10:35 B1 F.T. 'their train arrival' + 25min (Arrives at ferry) 11:00 B1 F.T. 'their times' Attempt to find time difference between 11:00 and 08:55 M1 (So total time $\Rightarrow$) $2(\text{hr}) 5 (\text{min})$ or equivalent. A1

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9.(a)(i) 11 (cm) (ii) 6 (cm) (iii) 6cm wide and 6cm length indicated (b) (9 stone 4 pounds $\Rightarrow$) $9 \times 14 + 4$ 130 (pounds) 15×2.2 33 (pounds) Comparison, e.g. $130 \div 33$ or multiples of 33 (33, 66, 99, ...) Completes sentence with '4'	B1 B1 B1 M1 A1 M1 A1 B1 B1 9	OR $130 \div 2.2$ (kg) ≈ 59 (kg) OR $59 \div 15$ or $60 \div 15$ or multiples of 15 (15, 30, 45, ...)
10. 52 visited the Millennium Stadium but not Cardiff Castle or Cardiff Bay 	B5 5	B4 for 4 correct entries B3 for 3 correct entries B2 for 2 correct entries B1 for 1 correct entry F.T. from previous entries until second error. <i>Award B4 if an answer of 22 (25 is used instead of 10 giving 3, 29 and an answer of 22).</i>