
Free-Standing Mathematics Qualification **MATHEMATICS**

4981 – Money Management
Mark scheme

4981
June 2015

Version/Stage: Version 1.0 Final

Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts: alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Assessment Writer.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Further copies of this Mark Scheme are available from aqa.org.uk

Key to mark scheme abbreviations

M	mark is for method
m or dM	mark is dependent on one or more M marks and is for method
A	mark is dependent on M or m marks and is for accuracy
B	mark is independent of M or m marks and is for method and accuracy
E	mark is for explanation
✓ or ft or F	follow through from previous incorrect result
CAO	correct answer only
CSO	correct solution only
AWFW	anything which falls within
AWRT	anything which rounds to
ACF	any correct form
AG	answer given
SC	special case
OE	or equivalent
A2,1	2 or 1 (or 0) accuracy marks
-x EE	deduct x marks for each error
NMS	no method shown
PI	possibly implied
SCA	substantially correct approach
c	candidate
sf	significant figure(s)
dp	decimal place(s)

No Method Shown

Where the question specifically requires a particular method to be used, we must usually see evidence of use of this method for any marks to be awarded.

Where the answer can be reasonably obtained without showing working and it is very unlikely that the correct answer can be obtained by using an incorrect method, we must award **full marks**. However, the obvious penalty to candidates showing no working is that incorrect answers, however close, earn **no marks**.

Where a question asks the candidate to state or write down a result, no method need be shown for full marks.

Where the permitted calculator has functions which reasonably allow the solution of the question directly, the correct answer without working earns **full marks**, unless it is given to less than the degree of accuracy accepted in the mark scheme, when it gains **no marks**.

Otherwise we require evidence of a correct method for any marks to be awarded.

Q	Solution	Mark	Total	Comment										
1 (a)	Paid £72.08 at Tesco [New Milton] with a card	B1	1	Accept paid out NOT paid in Accept With a card or with a debit card or from a card. Ignore any comments on balance etc Accept Tesco paid out... NOT withdrawal at Tesco Accept spent for paid or paid out Needs interpretation eg: no mark for debit card Tesco £72.08										
1 (b)	£40 + £70 + £40 = £150	B1	1											
1 (c)	£1124.89 + 800 = £1924.89	M1 A1	2											
Total			4											
2 (a)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">Type of expenditure</th> <th>Tally</th> </tr> </thead> <tbody> <tr> <td>Petrol and parking</td> <td> </td> </tr> <tr> <td>Clothing and footwear</td> <td> </td> </tr> <tr> <td>Supermarket shopping</td> <td> </td> </tr> <tr> <td>Leisure</td> <td> </td> </tr> </tbody> </table> <p>Add tallies</p>	Type of expenditure	Tally	Petrol and parking		Clothing and footwear		Supermarket shopping		Leisure		B2	2	must be a gate and one tally for P & P Two five tallies instead of 2 gates is one error B1 for 2 correct [-1 for each error; no negative marks]
Type of expenditure	Tally													
Petrol and parking														
Clothing and footwear														
Supermarket shopping														
Leisure														
2 (b)	Correct heights of bars	B2		B1 for 2 correct Allow ½ little square [eg 37 is not 30] Allow any size width or gap [if any], consistent or not Ruler not needed. Mark bar chart ignore anything else [frequency polygon] B1 for all heights correct [shown as freq polygon or vertical lines]										
	Label each bar	B1	3	labels could be written in bars or below; could be abbreviated If any height is within 2 small squares the mark for labels is available										

	Total		5	
3 (a)	£1.50	B1	1	
3 (b)	Half price teddy is $\frac{1}{2} \times \text{£}13.50 = \text{£}6.75$ Misaki paid $\text{£}13.50 + 6.75$ $= \text{£}20.25$	B1 M1 A1	3	B1 for seeing 6.75 M1 for 13.50 plus a clear result of their $\frac{1}{2}$ of 13.50 [needs $\frac{1}{2}$] As in all questions; condone £20.25p or 20.25 Answer line wins eg 20.25 in working but 20.50 in answer does not gain last A1 T & I or build up gains no marks unless it reaches one of the quoted answers given
3 (c)	Reduction is $\frac{18}{100} \times \text{£}24.49$ $= \text{£}4.4082$ $= \text{£}4.41$ Kasia pays $\text{£}20.08$	M1 A1 A1	3	$\frac{82}{100} \times \text{£}24.49$ M1 A1 Condone 4.40 or 4.41 not 4.4 for M1A1 4.4 without working is M1A0 Accept $\text{£}20.09$
	Total		7	

Q	Solution	Mark	Total	Comment
4 (a)(i)	£900	B1	1	
4 (a)(ii)	£950	B1	1	
4 (b)	11 parts Number of Beefeaters is $\frac{5}{11} \times 66$ = 30	B1 M1 A1	3	sensibly seen SC2 for 24,12,30 without identification SC1 for 12 or 24 without working
Total			5	
5 (a)	Change is £20 – £6.92 = £13.08	M1 A1	2	
5 (b)	Notes: £10 Coins: £2, £1, 5p, 2p, 1p	B1	1	Ft if needs ≥ 1 note and ≥ 3 coins Be generous in lack of £ and p Each note/coin needs identification
Total			3	
6	Cost is $\pounds \frac{25}{1.59}$ = £15.723.. = £15.72	M1 A1 A1	3	Accept £15.73 SC2 £16 £15.70 is no marks unless first line seen If 15.72 seen but 16 on answer line award full marks Must see 15.72 [or 15.73] for embedded answers
Total			3	

7 (a)		A	B	C	D	E
1	Item		Price in Poland	Price in UK	Difference between price in UK and price in Poland	Difference in price as a percentage of price in Poland
2	Corner sofa bed	£307	£525	£218	71	
3	Gazebo	£205	£250	£45	22	
4	TV bench	£205	£200	£5	2	
5	Chest of 4 drawers	£82	£130	£48	59	
6	Rug	£410	£475	£65	16	
		Column D Any in column E correct		B1 M1A1	Condone minus sign, no £ or no % Condone minus sign eg 22 is 21.951 so accept 21.9 to 22.0 for this correct 2 is 2.439 so accept 2.0 to 2.44 59 is 58.53 so accept 58.5 to 59 16 is 15.85 so accept 15.8 to 16 71 is 71.009 so accept 71 to 71.1	
		All in column E correct		A1	As above If all truncated 71, 21, 2, 58,15 M1A1	
		Answers to nearest whole number		B1	5	Everything correct as shown
7 (b)	Corner sofa bed			B1	1	
		Total			6	

Q	Solution	Mark	Total	Comment																
8	<table border="1"> <thead> <tr> <th></th> <th>Starting value (£)</th> <th>Interest (£)</th> <th>Final value (£)</th> </tr> </thead> <tbody> <tr> <td>First 3 months</td> <td>1900.00</td> <td>10.07</td> <td>1910.07</td> </tr> <tr> <td>Second 3 months</td> <td>1910.07</td> <td>10.12</td> <td>1920.19</td> </tr> <tr> <td>Third 3 months</td> <td>1920.19</td> <td>10.18</td> <td>1930.37</td> </tr> </tbody> </table>		Starting value (£)	Interest (£)	Final value (£)	First 3 months	1900.00	10.07	1910.07	Second 3 months	1910.07	10.12	1920.19	Third 3 months	1920.19	10.18	1930.37			
		Starting value (£)	Interest (£)	Final value (£)																
	First 3 months	1900.00	10.07	1910.07																
	Second 3 months	1910.07	10.12	1920.19																
	Third 3 months	1920.19	10.18	1930.37																
Second 3 months	$£1910.07 \times \frac{0.53}{100}$	M1		Accept 10.12																
Final value is	£1920.19	A1																		
Third 4 months	$£1920.19 \times \frac{0.53}{100}$	M1		Accept 10.18 ft dependent on first M1																
Final value is	£1930.37	A1	4	SC3 for 1p out Use answers in table rather than working Full answers given in table M1A0 M1A0																
	Total		4																	
9	Total number of weeks is 50	B1																		
	Weekly payment $\approx £ \frac{1000}{50}$	M1		Dependent on B1																
	$\approx £20$	A1	3	Accept $£ \frac{1100}{50} = 22 \approx £20$ $£20 \times 50 = £1000$ B1 M1 this is £99 out A0 $£20 \times 50 = £1000$ B1 M1 this is £99 out so the approximation is [nearly] correct A1 $£20 \times 52 = £1040$ this is £59 out 0 marks [there is no approximation]																
	Total		3																	
	TOTAL		40																	