AQA

Functional Skills Level 1
MATHEMATICS
8361/1

Paper 1 Non-Calculator

Mark scheme

January 2020

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 Examiner.

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

Glossary for Mark Schemes

GCSE examinations are marked in such a way as to award positive achievement wherever possible. Thus, for GCSE Mathematics papers, marks are awarded under various categories.

If a student uses a method which is not explicitly covered by the mark scheme the same principles of marking should be applied. Credit should be given to any valid methods. Examiners should seek advice from their senior examiner if in any doubt.

M	Method marks are awarded for a correct method which could lead to a correct answer.
A	Accuracy marks are awarded when following on from a correct method. It is not necessary to always see the method. This can be implied.
B	Marks awarded independent of method.
ft	Follow through marks. Marks awarded for correct working following a mistake in an earlier step.
SC	Special case. Marks awarded for a common misinterpretation which has some mathematical worth.
M dep	A method mark dependent on a previous method mark being awarded.
B dep	A mark that can only be awarded if a previous independent mark has been awarded.
oe	Or equivalent. Accept answers that are equivalent. eg accept 0.5 as well as $\frac{1}{2}$
[a, b]	Accept values between a and b inclusive.
[a, b)	Accept values a ≤ value < b
3.14…	Accept answers which begin 3.14 eg 3.14, 3.142, 3.1416
Use of brackets	It is not necessary to see the bracketed work to award the marks.

Examiners should consistently apply the following principles

Diagrams

Diagrams that have working on them should be treated like normal responses. If a diagram has been written on but the correct response is within the answer space, the work within the answer space should be marked. Working on diagrams that contradicts work within the answer space is not to be considered as choice but as working, and is not, therefore, penalised.

Responses which appear to come from incorrect methods

Whenever there is doubt as to whether a student has used an incorrect method to obtain an answer, as a general principle, the benefit of doubt must be given to the student. In cases where there is no doubt that the answer has come from incorrect working then the student should be penalised.

Questions which ask students to show working

Instructions on marking will be given but usually marks are not awarded to students who show no working.

Questions which do not ask students to show working

As a general principle, a correct response is awarded full marks.

Misread or miscopy

Students often copy values from a question incorrectly. If the examiner thinks that the student has made a genuine misread, then only the accuracy marks (A or B marks), up to a maximum of 2 marks are penalised. The method marks can still be awarded.

Further work

Once the correct answer has been seen, further working may be ignored unless it goes on to contradict the correct answer.

Choice

When a choice of answers and/or methods is given, mark each attempt. If both methods are valid then M marks can be awarded but any incorrect answer or method would result in marks being lost.

Work not replaced

Erased or crossed out work that is still legible should be marked.

Work replaced

Erased or crossed out work that has been replaced is not awarded marks.

Premature approximation

Rounding off too early can lead to inaccuracy in the final answer. This should be penalised by 1 mark unless instructed otherwise.

Continental notation

Accept a comma used instead of a decimal point (for example, in measurements or currency), provided that it is clear to the examiner that the student intended it to be a decimal point.

Q	Answer	Mark	Comments
1	7.036	B1	
	Additional Guidance		

Q	Answer	Mark	Comments
2	Ten thousand, three hundred and twenty four	B1	
	Additional Guidance		
	Allow incorrect spelling if word is obvious		
	The word 'and' may be omitted or added between 'thousand' and 'three'		
	Ignore incorrect grammar		

Q	Answer	Mark	Comments
3	7	B1	
	Additional Guidance		

Q	Answer	Mark	Comments
4	7.186	B1	
	Additional Guidance		

Q	Answer	Mark	Comments
5	10, 4 and 40	B2	B1 rounding to 10 or 4 or 40 with no working
	Additional Guidance		
	10 can be implied from multiples of 4 from 4 to 40 seen		

Q	Answer	Mark	Comments
6	**Alternative method 1**		
	$10 + 12 + 7 + 8 + 3 + 4$	M1	condone one error
	44	A1	
	Alternative method 2		
	$(10 + 12) \times 2$	M1	oe
	44	A1	
	Additional Guidance		
	One error can be one missing, one extra, one misread		

Q	Answer	Mark	Comments
7(a)	40 ÷ 8 or 5 or 24 ÷ 6 or 4	M1	5 or 4 can be embedded
	(40 ÷ 8) × 1.5(0) or 7.5(0)	M1	7.5(0) or 4.8(0) implies first M1
	(24 ÷ 6) × 1.2(0) or 4.8(0)	M1	If 4 and 5 are interchanged award M1 for 4 × 1.5(0) **and** 5 × 1.2(0)
	their 7.5(0) + their 4.8(0) or 12.3(0) or 12 – their 7.5(0) or 4.5(0) or 12 – their 4.8(0) or 7.2(0)	M1	their 7.5(0) must be from 1.5(0)n where $n > 1$ and their 4.8(0) must be from 1.2(0)n where $n > 1$
	12.3(0) and No or 4.8(0) and 4.5(0) and No or 7.5(0) and 7.2(0) and No	A1	

Additional Guidance	
Build–up methods for finding the correct number of packs must get to 5 packs of plates or 4 packs of cups Example 8 + 8 = 16, 16 + 8 = 24, 24 + 8 = 32, 32 + 8 = 40 so 1.50 + 1.50 = £3, £3 + 1.50 = 4.00, £4 + 1.50 = 5.50, 5.50 + 1.50 = £7 (implies 5 lots of 1.50)	M1M1
Allow working in pence throughout but they must compare in consistent units eg 1200 and 1230 and No gains full marks.	
Do not allow misreads in this question.	
Interchanging 5 and 4 can gain M1M1M0M1A0	

Q	Answer	Mark	Comments
	Alternative method 1		
	1000 g = 1 kg or 1000 used	M1	
	their 1000 ÷ 50	M1	
	20	A1	SC1 2 (bags)
	Alternative method 2		
	1 ÷ 50 or 0.02	M1	
	their 0.02 × 1000	M1	
7(b)	20	A1	SC1 2 (bags)
	Additional Guidance		
	If a build-up method is used it must be completed up to 1000 g Example 2 bags = 100 g 10 bags = 500 g 20 bags = 1000 g (with answer 20) Partial build-up is M0		M2A1
	100 ÷ 50 or 2 bags gains M0M1A0		

Q	Answer	Mark	Comments
7(c)	6 × 2 or 12 or (6 + 1) × 2 or 7 × 2	M1	implied by 12 + 2
	14	A1	
	Additional Guidance		

Q	Answer	Mark	Comments
7(d)	140 – 50 or 90	M1	do not allow with incorrect further work 90 ÷ 30 implies M1
	3	A1	
	Additional Guidance		
	Example of incorrect further work for method mark 140 – 50 = 90, 90 – 30 = 60		M0
	T&I methods with answer 3		M1A1
	T&I methods with answer not 3		M0A0