



Functional Skills Level 1 MATHEMATICS

8361/1

Paper 1 Non-Calculator

Mark scheme

January 2022

Version: 1.0 Final



2 2 1 A 8 3 6 1 / 1 / M S

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

Copyright information

AQA retains the copyright on all its publications. However, registered schools/colleges for AQA are permitted to copy material from this booklet for their own internal use, with the following important exception: AQA cannot give permission to schools/colleges to photocopy any material that is acknowledged to a third party even for internal use within the centre.

Copyright © 2022 AQA and its licensors. All rights reserved.

Glossary for Mark Schemes

Functional Skills examinations are marked in such a way as to award positive achievement wherever possible. Thus, for Functional Skills 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 $a \leq \text{value} < b$
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.

Section A

Q	Answer	Mark	Comments
1	-23	B1	

Q	Answer	Mark	Comments
2	97.004	B1	

Q	Answer	Mark	Comments
3	5 × 5 or 25 or 3 × 3 or 9	M1	oe
	34	A1	

Q	Answer	Mark	Comments
4	$2\frac{4}{5}$	B1	condone $\frac{14}{5}$ or 2.8(0)

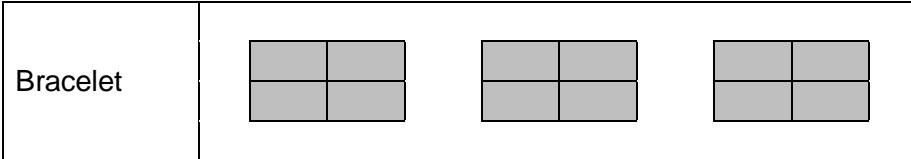
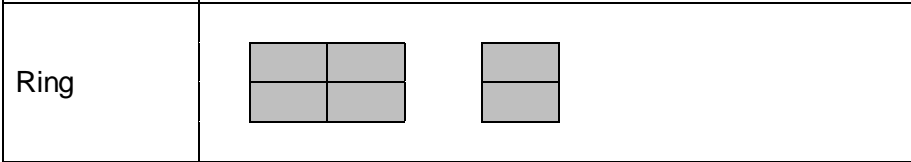
Q	Answer	Mark	Comments	
5	$10 \times 2 \times 8$	M1		
	160	A1		
	cm^3	B1	oe eg cubic centimetres	
	Additional Guidance			
	Correct units mark is independent of the answer			
	Mark the units on the answer line. If there are no units then credit can be given for the correct units in the working lines.			
	Award M1 for $10 \times 2 \times 8$ even if not used or extra method is seen eg $10 \times 2 = 20$ $20 \times 8 = 160$ $160 + 20 = 180$			M1A0

Q	Answer	Mark	Comments
6 (a)	6×3 or 18	M1	oe
	8	A1	
	Additional Guidance		
	6 : 18		

Q	Answer	Mark	Comments
6 (b)	Alternative method 1-working in cm		
	2×100 or 200	M1	may be implied
	their 200 \div 4 or 50	M1	oe implied by 150 cm left their 200 cannot be 20
	their 200 – their 50 or their 50 \times 3 or 150	M1dep	dep on 2nd M1
	their 150 \div 20 or 7.5	M1	oe eg counting in 20s to their 150 their 150 must be ≥ 40
	7 with no incorrect working seen	A1	
	Alternative method 2-working in m		
	$2 \div 4$ or 0.5	M1	oe implied by 1.5(m) left
	2 – their 0.5 or 1.5	M1dep	
	$20 \div 100$ or 0.2	M1	
	their 1.5 \div their 0.2 or 7.5	M1	oe eg counting in 0.2s to their 1.5 their 1.5 must be ≥ 0.4
	7 with no incorrect working seen	A1	
	Additional Guidance		
	using 2000 cm = 2 metres can score max 3 marks $2000 \div 4$ or 500 $2000 - 500$ or 1500 $1500 \div 20 = 75$		M0M1M1 M1A0
	200 may not be seen eg 50 cm (used) eg 150 cm (left)		M1M1 M1M1M1
	For the 4th mark allow mixed units if answer is recovered eg $1.25 \text{ (m)} \div 20 \text{ (cm)} = 6.25$		4th M1

Q	Answer	Mark	Comments
6 (c)	16 and 11 or 27	M1	
	45 – their 16 – their 11 or 18	M1	their row for bracelets + their row for rings = 18 implies M1M1 may not be correct format
	their $18 \div 3$ or their $18 \times \frac{2}{3}$	M1	only implied by pictogram if the other row is blank 6 with no working and no value for bracelets implies M1M1M1 12 with no working and no value for rings implies M1M1M1
	12(bracelets) and 6(rings)	A1	implied by pictogram with correct number of units may not be in correct format
	Correct pictogram for 12 bracelets and 6 rings	A1ft	ft their 12 and 6 if first two method marks awarded SC4 bracelets row drawn as 6 and rings row as 12, both in correct format SC3 their row for bracelets + their row for rings = 18, both in correct format SC1 their drawing for rings = 6 with no correct working shown and bracelets incorrect or their drawing for bracelets = 12 with no correct working shown and rings incorrect SC1 their bracelets = twice their rings but not 6 and 12

Additional Guidance is on the next page

		Additional Guidance	
6 (c) cont'd	Fully correct answer		M1M1M1A1 A1
	Bracelet		
	Ring		
	The two squares can be horizontal or vertical		
	6 and 12 seen but 6 bracelets and 12 rings drawn		M1M1M1A1 A0
	If the pictogram is completed but no correct working or values are shown award SC1 for any of the following in any format, drawing of bracelets not 12 but rings drawing for 6 drawing of bracelets 12 but drawing of rings not 6 drawings of bracelets twice as much as drawings of rings but not 12, 6 or totalling 18 SC3 for total of 18 in their 2 rows, both in correct format SC4 bracelets 6 and rings 12, both in correct format		SC1 SC1 SC1 SC3 SC4
Correct format of drawings of bracelets and rings not 12 and 6 but total 18 eg 10 bracelets as 2.5 diagrams and 8 rings as 2 diagrams		M1M1M0A0 A1ft	