Functional Skills Level 2
MATHEMATICS
8362/1

Paper 1 Non-Calculator

Mark scheme

January 2022

Version: 1.0 Final

2 2 1 A 8 3 6 2 / 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

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 $a \leq$ 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	0.76	B1	

Q	Answer	Mark	Comments
2	$7 - 5$ completed first and the result cubed	M1	implied by 8
	14	A1	
	Additional Guidance		
	eg $2^3 = 6$ $22 - 6 = 16$ eg $7 - 5 = 2$ $2 \times 3 = 6$ $22 - 6 = 16$		M1A0 M1A0

Q	Answer	Mark	Comments
3	$\frac{2}{6}$ or Change both fractions to a common denominator with at least one numerator correct	M1	eg $\frac{10}{12}$ and $\frac{4}{12}$ or $\frac{15}{18}$ and $\frac{6}{18}$ or $\frac{10+4}{12}$
	$\frac{7}{6}$ or $1\frac{1}{6}$	A1	oe eg $\frac{14}{12}$ or $1\frac{2}{12}$ or $\frac{21}{18}$ or $1\frac{3}{18}$
	Additional Guidance		
	Ignore any attempt to simplify a fraction or convert to a mixed number or decimal after a correct answer is seen		

Q	Answer	Mark	Comments
4	(0).217	B2	B1 (0).2(…) or digits 217 seen

Q	Answer	Mark	Comments
5	27 043 060	B1	
	Additional Guidance		
	Ignore punctuation		
	Answer line takes precedence		

Section B

Q	Answer	Mark	Comments
6(a)	20 and 45 and 150 and 70	M1	may be seen in the table implied by 285 allow one error
	their 20 + their 45 + their 150 + their 70 or 285	M1dep	may be seen in the table
	their 285 ÷ 15 or 19 or 20 × 15 or 300	M1	their 285 cannot be 15 or 20 and must not be the sum of the midpoints
	19 and Yes or 285 and 300 and Yes	A1	
	Additional Guidance		
	If 285 ÷ 15 is laid out using a division box then the 1 with yes is enough for A1, but if completed it must be correct eg $15\overline{)285}$ (1) and Yes		M1M1M1A1
	First two marks can be awarded even if not used		

Q	Answer	Mark	Comments
6(b)	3 (+) 9 (+) 18 (+) 34 (+) 26 or 90	M1	allow one error may be on the chart implied by 12 and 78
	Selects their 3 and their 9 and adds or 12	M1	their 3 and their 9 must be their frequencies for ratings of 1 and 2 and must be whole numbers
	$\frac{12}{90}$	A1	oe fraction implied by $\frac{2}{15}$
	$\frac{2}{15}$	B1ft	ft correct simplification of their $\frac{12}{90}$
	Additional Guidance		
	If their $\frac{12}{90}$ cannot be simplified they cannot access the final mark		
	Answer $\frac{2}{15}$		M1M1A1B1
	Further work after simplified fraction seen B0		

Q	Answer	Mark	Comments
6(c)	20 370 – 12 570 or 7800	M1	
	their 7800 ÷ 10 × 2 or 0.2 × their 7800 or 1560	M1	oe eg (10% =) their 7800 ÷ 10 or 780 and (20% =) their 780 × 2
	their 1560 + 1296.24	M1dep	dep on previous M1 implied by 20 370 – their 1560 – 1296.24 or 17 513.76
	2856.24	A1	
	Additional Guidance		
	If a build-up method is used for the second mark it must be complete		
	their 7800 can be 20 370 eg 0.2 × 20 370 = 4074 4074 + 1296.24 5370.24		M0M1M1A0
	their 7800 can be 12 570 eg 0.2 × 12 570 = 2514 2514 + 1296.24 3810.24		M0M1M1A0