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NCFE Level 1 Functional Skills Qualification in Mathematics (603/5055/6)

Mark scheme: SAM
v1.0

SAMPLE

Examiner Mark Scheme Guidance

Information

This guidance is intended to support NCFE examiners in the valid, reliable and consistent application of the relevant mark scheme version, against learner evidence generated during their external assessment.

This mark scheme provides:

- the total marks available for each question
- the subject content reference for each mark
- example process/methods and evidence of the types of responses expected for each mark
- (once confirmed) the pass mark for the relevant assessment version.

This mark scheme **must** be used for paper-based and online marking of the assessment version indicated**.**

Instructions and guidance on application

- All learners must receive the same treatment and should be marked fairly. Examiners must mark the first learner in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Learners must be rewarded for what they have shown they can do rather than penalised for things they have not done.
- Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Half marks must not be awarded.
- Examiners should be prepared to award zero marks if the learner's response is not worthy of credit according to the mark scheme.
- The mark scheme is a working document and may be added to at the standardisation to reflect valid alternative answers given by a learner.
- When in doubt regarding the application of the mark scheme to a learner's response, the Chief Examiner must be consulted.

This mark scheme provides the following information:

- section and activity information
- question number
- total marks available per question (top row, shaded) followed by
- attribution of individual marks per question
- problem solving (PS) and underpinning skill (UPS) attribution
- process/method or answers, as well as additional or alterative evidence; indicative of the subject content (SC) attribution
- any additional guidance, as required.

To support the valid, reliable and consistent marking of learner evidence, the following abbreviations are applied throughout the mark scheme:

Annotation	Explanation and use
FT	Follow through marks are applied when there are earlier mistakes in the method.
OE	Or equivalent marks are available for the justification of the answer being presented in a different form to the mark scheme i.e. 0.5 or ½.

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CAO	Correct answer only.
Their	'Their' refers to the learners' own values.
Seen	Seen refers to the requirement to see the stated value in the learner's response or working out.
Imp	Implied refers to the learner's response implying correct working out used but not seen.
Brackets	Indicates units are not required on final answers or for answers seen within working.
BOD	Benefit of doubt where learner handwriting may be difficult to interpret but previous working may indicate correct final answer.
Shaded	Indicates requirements for full marks to be awarded.

Version Control

Mark schemes are subject to version control. Examiners **must** ensure they have access to the latest version following each standardisation event.

Over time mark schemes will incorporate additional evidence captured and confirmed during standardisation events. Any additional evidence criteria will be captured in colour-coded text applicable to the dated standardisation event.

Recording of marks

Paper-based: Individual marks should be annotated in the 'Examiner' column in the learner script, added up and recorded at the end of each activity. The overall marks awarded for each learner should be clearly and legibly recorded in the grid on the front of the learner script.

Online: Onscreen marking tools (i.e. ticks, crosses) marks should be applied to indicate application throughout the learner script, in addition to marks being recorded numerically within the corresponding 'Learning Outcomes' box, indicated by the relevant Subject Content reference.

Annotation	Explanation and use
Tick	Used to indicate correct values/method or final answer.
Red highlight	Used to indicate where the learner has made an error in either the value used or an incorrect calculation.
Red line box	Used to indicate where the learner may have made an error that has resulted in benefit of doubt being applied i.e. transposition of figures but previous working clearly shows otherwise.

Paper number:			**Level 1 SAM**	**Version:** 1.0	

(Section A) Activity 1: Driving test   (Non-calculator Test)

Q	Marks	UPS / PS	Process and Answer	Additional or Alternative Evidence (with guidance)	SC
1 (a)	**2**	**UPS**	750 000 or 750,000 or 750000	Award 2 marks if correct answer given	
	1		75 seen at start of number		N9
	1		750 000 or 750,000 or 750000	Accept any standard notation; do not accept 750.000 Must be numerical.	N1a
1 (b)	**1**	**UPS**	86 (%)	CAO	N16
1 (c)	**2**	**PS**	15 (feet) with correct explanation		
	1		i. correct explanation relating to the order in which operations are completed	e.g. "he should have multiplied first"	N7
	1		ii. 15 (feet)	CAO	N7
1 (d)	**4**	**PS**	148.75 (feet)	Award 4 marks if correct answer given	
	1		3600 seen	(from 60 × 60) Implied if 180 seen	N6
	1		60 × 60 × 0.05 or 180	If 60 × 0.05 (= 3) is found then award for their 3 × 60 OE	N5
	1		Their 180 – 31.25	FT correct subtraction of 31.25 from their 180	N11a
	1		148.75 (feet)	CAO	N11a
1 (e)	**2**	**UPS**	(£)106.50	Award 2 marks if correct answer given	
	1		$710 \times \frac{15}{100}$ or 710×0.15 or $10\% = 71$ **and** $71 + (71 \div 2)$	Correct method for finding 15% of £710	N14
	1		(£)106.50	CAO must use 2dp	N14
1 (f)	**4**	**PS**	(£)108	Award 4 marks if correct answer given	
	1		649.5(0)	From 30 × 21.65	N11b
	1		Their 649.5 + 62 or 711.5	Correct answer from their 649.5 + 62	N11a
	1		710 – their 106.50 or 603.5(0)	Their 15% from (e)	M19

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	1		(£)108	CAO	N11a

(Section B) Activity 2: House and garden (Calculator Test)					
Q	**Marks**	**UPS / PS**	**Process and Answer**	**Additional or Alternative Evidence (with guidance)**	**SC**
2 (a)	**1**	**PS**	No with valid explanation	e.g. it has only gone up (£)23 240 e.g. double would make it (£)366 480	N1b
2 (b)	**1**	**PS**	No with valid explanation	e.g. the graph only shows the change e.g. the change is negative but the price might still be high	N2
2 (c)	**1**	**PS**	West Midlands	CAO	N16
2 (d)	**2**	**UPS**	(£)312.75	Award 2 marks if correct answer given	
	1		0.05×6255 or $\frac{5}{100} \times 6255$	OE	M18
	1		(£)312.75	CAO	M18
2 (e)	**2**	**PS**	7.8 (m)	Award 2 marks if correct answer given	
	1		2.2 and 1.7		M22b
	1		7.8 (m)	FT 2 × their (2.2 + 1.7) OE	M22b
2 (f)	**3**	**PS**	See below		
	Alternative method 1				
	1		1350 ÷ 50 or 27 **and** 1000 ÷ 50 or 20		M21
	1		Their 27 × 10 or 270 **and** their 20 × 10 or 200 or 297 ÷ 10 or 29.7 **and** 210 ÷ 10 or 21		M20a
	1		Yes (Nadia is correct), with working	Dependent on having scored the previous 2 marks. FT their figures.	M21
	Alternative method 2				
	1		297 ÷ 10 or 29.7 **and** 210 ÷ 10 or 21		M20a
	1		Their 29.7 × 50 or 1485 **and** their 21.0 × 50 or 1050		M21
	1		Yes (Nadia is correct), with working	Dependent on having scored the previous 2 marks. FT their figures.	M21

2 (g)	2	PS	See below		
	1		3:1 seen	Condone 4/5 and ¾ OE or 0.8 and 0.75 or 80%	N17
	1		Good to Grow, indicated with correct working		N17
2 (h)	3	PS	(£)11.85	Award 3 marks if correct answer given	
	Alternative method 1				
	1		60 × 45 or 2700		N17
	1		2700 /1000 or 2.7		M20b
	1		(£)11.85	CAO 2 marks for 10.67 (from 2.7 × 3.95)	N12
	Alternative method 2				
	1		1000 ÷ 45 or 22.22(…)		M20b
	1		60 ÷ 22.22(…) or 2.7		N17
	1		(£)11.85	CAO 2 marks for £10.67 (from 2.7 × 3.95)	N12

Activity 3:		Gymnastics Competition (Calculator Test)			
Q	**Marks**	**UPS / PS**	**Process and Answer**	**Additional or Alternative Evidence (with guidance)**	**SC**
3 (a)	**1**	**UPS**	0.85	CAO	N11a
3 (b)	**2**	**UPS**	2.6	Award 2 marks if correct answer given	
	1		9.95 **and** 7.35 seen		H29b
	1		2.6 or 2.60	CAO	H29b
3 (c)	**2**	**UPS**	11.4 or 11.40	Award 2 marks if correct answer given	
	1		79.8(0) ÷ 7		H29a
	1		11.4 or 11.40	CAO	H29a
3 (d)	**2**	**PS**	Yes (Pat is correct) **with** supporting working		
	1		11.55 + 9.90 + 12.50 + 12.75 = 46.70 or 46.7 – 11.55 – 9.90 – 12.50 = 12.75	OE	N11a

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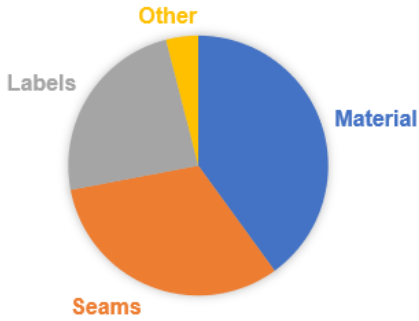|	1		Yes (Pat is correct) **with** supporting working	e.g. 46.70 – 33.95 = 12.75 Working must be shown	N10
3 (e)	**2**	**PS**	Pat is the winner, with valid reason	Award 2 marks if correct answer given, with reason	
	1		Pat and Alex identified as joint total points		N10
	1		Pat is the winner, with valid reason	e.g. did better on 3 events; if reason implies a tie, award 2; FT their working for part d. Do not accept Alex as even with FT it will never be him/her	N10
3 (f)	**3**	**PS**	236 (g)	Award 3 marks if correct answer given	
	1		345 ÷ 3 or 118		N17
	1		118 × 2		N17
	1		236 (g)	CAO	N17
3 (g)	**3**	**PS**	4.8 (cm)	Award 3 marks if correct answer given	
	1		6.5 × 6.5 × [height] = 202.8	OE accept any representation of height e.g. "h" or "?" or "x"	M23
	1		$\dfrac{202.8}{6.5 \times 6.5}$ or 202.8 ÷ 42.25 or 4.8	OE implies first mark	M23
	1		4.8 (cm)	CAO	M23

Activity 4:		Bears	(Calculator Test)		
Q	**Marks**	**UPS / PS**	**Process and Answer**	**Additional or Alternative Evidence (with guidance)**	**SC**
4 (a)	**2**	**UPS**	6 (11 – 20) and 4 (21 – 30) placed correctly		
	1		6 correctly placed		H28a
	1		4 correctly placed		H28a

Additional Guidance:

Number of faults	Number of days
0 to 10	10
11 to 20	**6**
21 to 30	**4**

4 (b)	**3**	**PS**	144 000	Award 3 marks if correct answer given	

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	1		240 000		N1a
	1		(Their 240 000) ÷ 5 x 3 or 48 000 × 3	OE	N9
	1		144 000	CAO	N9
4 (c)	**5**	**PS**	See below		

1	One angle (or percentage) calculated correctly to nearest whole number	Total is 180. FT their total only if clearly from sum.	H27b

	Material	Seams	Labels	Other
	72	54	45	9
%	40	30	25	5
angle	144	108	90	18

	1		All angles (or percentages) calculated correctly to the nearest whole number)	No FT	H27b
	1		One sector drawn correct size ± 2° or 2%	FT their angles (percentages) only if they sum to 360 (100), 144º, 108 º, 90º 18º - 4, 3, 2.5, 0.5 sectors	H27b
	1		All sectors drawn correct size		H27b
	1		Sectors labelled correctly, with appropriate title	May be in a key	H27b

4 (d)	**3**	**PS**	0.15 clearly labelled and correctly positioned	Award 3 marks if 0.15 clearly labelled and correctly positioned.	
	1		$\frac{3}{20}$ seen	OE	H31
	1		0.15 seen or implied	May be implied by correct position	N16
	1		0.15 clearly labelled and correctly positioned	FT their 0.15 if in range 0 <value<1 Position must be their 0.125 ± 0.175	H30a
4 (e)	**2**	**UPS**	0.86	Award 2 marks if correct answer given	
	1		$\frac{6}{7}$ or 0.857(…) or 1 – 0.14(…)		H31
	1		0.86	CAO	N12

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