



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

Mark scheme: P001424

v1.6 Post standardisation Refresher 9.9.2022

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 alternative 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 arithmetic 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 $\frac{1}{2}$.
CAO	Correct answer only.
Their	'Their' refers to the learners' own derived 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.

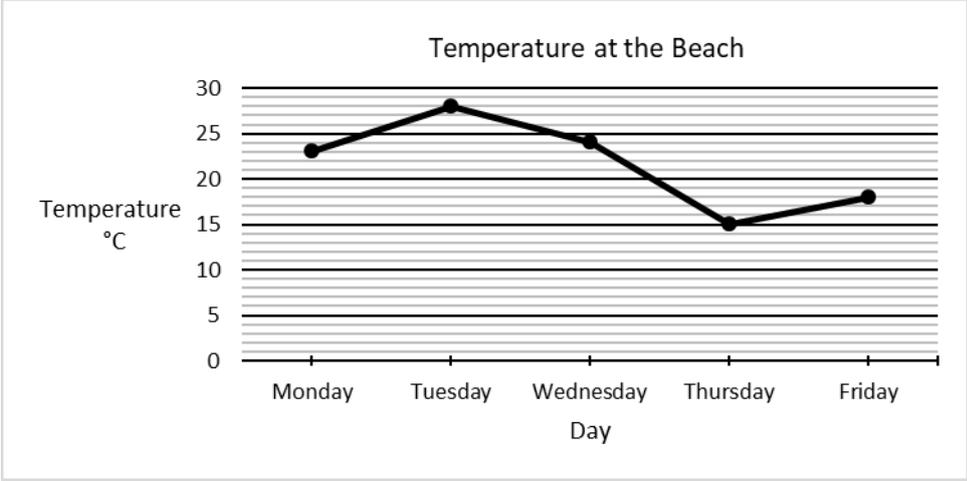
Annotation	Explanation and use
Tick	Used to indicate correct values/method or final answer.
Red highlight	Used to indicate where the learner has made an error in either the value used or an incorrect calculation.
Red line box	Used to indicate where the learner may have made an error that has resulted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

Paper number: P001424		Version: 1.5	Pass mark: 38		
(Section A) Activity 1: Coffee shop (Non-calculator Test)					
Q	Marks	UPS / PS	Process and Answer	Additional or Alternative Evidence (with guidance)	SC
1 (a)	1	UPS	(£) 2020	Ignore commas and spaces	N1a
1 (b)	1	UPS	60 (%)		N16
1 (c)	2	PS	756 (students)	Award 2 marks if correct answer given	
	1		126 × 6		N4
	1		756 (students)		N4
1 (d)	3	PS	45 (students)	Award 3 marks if correct answer given	
	1		900 × 25 ÷ 100 or 225	OE method to find 25% of 900	N14
	1		(900 × 25 ÷ 100) ÷ 5 or 225 ÷ 5	Implies first mark	N9
	1		45 (students)	CAO	N9
1 (e)	2	PS	3.15 (kg)	Award 2 marks if correct answer given	
	1		0.67 (kg) or 0.48 (kg) or 1.15 (kg) or 2000 (g)	OE 3150 (g)	M20b
	1		3.15 (kg)		M20b
1 (f)	3	PS	Yes and 594	Award 3 marks if correct answer given	
	1		16.5 × 9 × 4	OE, eg 500 ÷ 9 ÷ 4	M23
	1		148.5 or 66 or 594	OE	N11b
	1		Yes and 594	OE Yes supported with correct working	N11b
1 (g)	3	PS	No and 1.3	Award 3 marks if correct answer given	
	1		6.5		N11a
	1		(1.2 + 1.1 + 1.4 + 1.6 + 1.2) ÷ 5 OR 1.4 × 5 or 7		H29a
	1		No and 1.3 OR No and 6.5 and 7	OE No supported by correct working	H29a

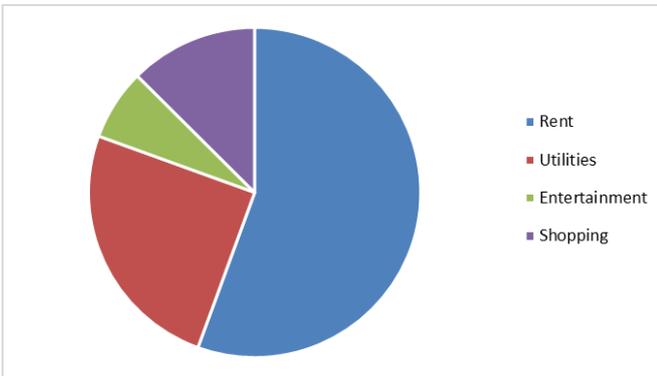
(Section B) Activity 2: Delivery driver (Calculator Test)								
Q	Marks	UPS / PS	Process and Answer	Additional or Alternative Evidence (with guidance)		SC		
2 (a)	3	PS	Yes AND 6.75 hours or 6 hours and 45 minutes	Award 3 marks if correct answer given				
	1		$(3 \times 60) + 35 + (2 \times 60) + 5 + 20 + 45$ or 105 or 405	OE		M20e		
	1		$105 \div 60$ or 1.75 or 1 hr 45 mins or $405 \div 60$ or 6.75 or 6 hours and 45 mins	OE Implies 1 st mark Allow if 105 and 90 seen or 405 and 390 seen or 6:45 seen		M20e		
	1		Yes AND 6.75 or 6 hours 45 minutes	OE Yes supported with correct working FT their 6.75 from correct method Allow Yes AND 405 and 390 Do not allow Yes AND 105 and 90 for final mark Do not accept No and 6.45 hours		M20e		
2 (b)	2	PS	4 (hours)	Award 2 marks if correct answer given				
	1		5×0.8	OE any full correct method		N14		
	1		4 (hours)			N14		
2 (c)	1	UPS	6075	CAO		N6		
2 (d)	5	PS	See Below		Plastic bottles	Glass bottles	Total	
				Semi skimmed milk	96	224	320	
				Whole milk	4	76	80	
				Total	100	300	400	
	1		$400 \div 5$ or 80	May be seen in the table in correct cell		N17		
	1		320 (semi skimmed) or 80 (whole)	May be seen in the table in correct cell		N17		
	1		$0.3 \times$ their 320 or $0.05 \times$ their 80	OE any full correct method Their 320 and their 80 must total 400 and be from correct method		N13		
1		96 and 4	May be seen in the table Award if incorrectly placed Implies 1 st 3 marks		N13			
1		Table correctly completed	FT their values with some working e.g. use of $\div 5$ or 30% or 5% calculated if (rounded to whole numbers) and the 4 cells total 400		H27a			
2 (e)	1	UPS	$125 + 0.45 \times 62$	CAO		N7		

2 (f)	1	UPS	104 (km)		N5
2 (g)	1	UPS	120 000 (m)		M20a
2 (h)	1	UPS	3.05 3.055 3.5 3.505		N10

Activity 3: Staycation (Calculator Test)					
Q	Marks	UPS / PS	Process and Answer	Additional or Alternative Evidence (with guidance)	SC
3 (a)	2	PS	(Company) A AND (£) 77.5(0) and (£) 41.25	Award 2 marks if correct answer given	
	1		0.1 × 775 or 77.5(0) or 0.05 × 825 or 41.25	OE Any correct full method	N13
	1		(Company) A AND (£) 77.5(0) and (£) 41.25	Only accept (Company) A and (£)697.5(0) and (£)783.75 if (£)697.5(0) comes from 775 – 77.5 seen and (£)783.75 comes from 825 – 41.25 seen	N13
3 (b)	2	PS	(Company) D AND 40% OR (Company) D AND $\frac{7}{20}$ and $\frac{8}{20}$ OR (Company) D AND 0.35 and 0.4(0)	Award 2 marks if correct answer given	
	1		40% OR $\frac{7}{20}$ and $\frac{8}{20}$ OR 0.35 and 0.40	OE	N16
	1		(Company) D AND 40% OR (Company) D AND $\frac{7}{20}$ and $\frac{8}{20}$ OR (Company) D AND 0.35 and 0.4(0)	OE (Company) D supported with correct working allowing a direct comparison	N16
3 (c)	1	UPS	(£) 147.74		M20d
3 (d)	1	UPS	135 (°) or 225 (°)		M26a
3 (e)	2	PS	6 (km)	Award 2 marks if correct answer given	
	1		4 × 1.5	OE	M21
	1		6 (km)	CAO	M21
3 (f)	4	PS	See Below		
	1		Linear scale starting at zero		H27d
	1		Both axes correctly labelled	Accept Temp °C or °C	H27d
	1		At least 3 points correctly plotted	Scale must be linear within range 23, 28, 24, 15, 18 Award this mark if bars drawn	H27d

	1		All points correctly plotted and joined with straight lines (dotted or full)	Scale must be linear within range and indicate 30	H27d
Additional Guidance					
					
3 (g)	1	UPS	Correct drawing of any octagon	It doesn't have to be regular	M24a
3 (h)	2	UPS	Number of Miles	Number of Days	Award 2 marks if correct answer given
			0 - 19	4	
			20 - 39	7	
			40 - 59	7	
			60 +	3	
		Total	21		
1		Frequencies total to 21	Do not accept tallies without frequencies	H28a	
1		Fully correct table		H28a	

Activity 4: Using the internet (Calculator Test)					
Q	Marks	UPS / PS	Process and Answer	Additional or Alternative Evidence (with guidance)	SC
4 (a)	1	UPS	(£) 48		H29b
4 (b)	2	PS	(£) 1983.75	Award 2 marks if correct answer given	
	1		$1725 + (0.05 \times 1725 \times 3)$	OE full correct method	M18
	1		(£) 1983.75		M18
4 (c)	2	PS		Award 2 marks if 0.1 clearly and correctly positioned Accept any mark or arrow as long as clearly on 0.1	

	1		$\frac{2}{20}$ seen	OE	H31
	1		0.1 clearly labelled and correctly positioned	Correct mark on the scale implies the first mark FT their fraction if fraction is < 1	H30a
4 (d)	2	PS	Long or 102 AND 101.6 (cm) OR Long or 102 AND 40.1(574...)	Award 2 marks if correct answer given	
	1		40×2.54	Allow any of these lengths divided by 2.54	N5
	1		Long or 102 AND 101.6 (cm) OR Long or 102 AND 40.1(574...)	OE long or 102 supported with correct working. Allow long or 102 and 40.1(574...)	N5
4 (e)	2	PS	(£) 73.95	Award 2 marks if correct answer given	
	1		0.85×87 or 73.95	OE correct method	M19
	1		(£) 73.95		M19
4 (f)	4	PS	Fully correct pie chart	Award 4 marks if correct answer given	
	1		Eg $800 \div 1440 \times 360$	OE Correct method to find one angle	N17
	1		Eg $800 \div 1440 \times 360$ or 200 and $360 \div 1440 \times 360$ or 90 and $100 \div 1440 \times 360$ or 25 and $180 \div 1440 \times 360$ or 45	OE Correct method to find four angles Implies 1 st mark May be implied if all 4 sectors drawn correctly.	N17
	1		One sector correctly drawn	Implies 1 st mark Allow $\pm 2^\circ$ tolerance	H27b
	1		All sectors correctly drawn and labelled	Allow $\pm 2^\circ$ tolerance	H27b
Additional guidance: Example					
					
4 (g)	1	UPS	(£) -3.85	CAO Award if (£)3.85 OD or Overdrawn indicated	N2
4 (h)	1	UPS	$1\frac{3}{10}$	CAO Award for 1.3	N8a