Sample Mark Scheme: P000291

NCFE Functional Skills Qualification in Mathematics at Level 1 (501/2325/7)

Activity 1		Marks
1A1	**3 (months) with January, February, December**	**2**
	3 (months) **OR** January, February, December	1
	3 (months) **AND** January, February, December (accept 3 and Jan, Feb, Dec)	1
1A2	**1 in 3, 1/3, 0.33 or 33%**	**2**
	4/12 OR 4 (months), OR named as January, February, March, December (or Jan, Feb, March, Dec)	1
	1 in 3, 1/3, 0.33 or 33% (do not accept 0.3 or 1:3) **Follow through (FT)** their months/12 in appropriate form	1
1B1	**3:2**	**2**
	12:8 or 6:4 (accept 8:12 if clear that this is motorcycle : bus)	1
	Correct answer only (CAO) 3:2	1
1B2	**1 hour 30 minutes**	**2**

Activity 1		Marks
	1.5 (hours) OR 90 (minutes) seen OR 6/4 = (1.5) OR 360/4 = (90) OR equivalent, for example, 15 mins (travel) = 1 hours (work) or 30 mins (travel) = 2 hours (work). Do not just accept 1 hour (travel) = 4 hours (work)	1
	CAO 1 hour 30 minutes	1
1C1	**08:10 and 08:23 (condone 8:10 and 8:23)**	**2**
	08:10 in first data row (accept 8:10 or 8.10)	1
	08:23 in last row (accept 8:23 or 8.23)	1
1C2	**33 (minutes) with valid check**	**4**
	CAO 36 (minutes), 34 (minutes), 29 (minutes)	1
	36 + 34 + 29 / 3 OR 99/3 seen. Allow FT for errors on journey times only.	1
	33 (minutes) FT for errors on journey times only	1
	Check using reverse calculation, for example: 33 x 3 = 99 or 99 – 29 – 34 = 36	1
	Total marks	**14**

Activity 2		Marks
2A1	**£5.40 must be shown to 2 decimal places with units (£)**	**3**
	10 (journeys) seen OR 2 x 5 x 6 OR 10 x 6 or evidence of	1
	distance (6 or 60) multiplied by cost (0.09 or 9 (pence))	1

Activity 2		Marks
	CAO £5.40 must be shown to 2 decimal places with £	1
2A2	**(£) 11.05**	**3**
	(£) 1.95 seen OR 13/100 x 15 OR 13/100 x 85 OR 1.30 + 0.65 OR equivalent	1
	13 x 0.85 = (11.05) OR 13 – 1.95 = (11.05) or equivalent	1
	CAO (£) 11.05	1
2A3	**£6.15 units required (£)**	**2**
	5 x 1.23 OR 6.15 OR 615 seen	1
	CAO £6.15 (accept 615 p or 615 pence) units required	1
2B	**No, with (£) 175 seen**	**3**
	(£)175 seen or 25 + 50 + 60 + 27 + 13	1
	180 – 175 = 5 OR 175 + 15 = 190	1
	No with (£) 175 OR no with comparison of (£) 180 and (£) 190 needed. Accept no with explanation of only (£) 5 left or no with explanation of a further (£) 10 needed. Note: yes or no without calculations or amounts = 0 marks	1
2C1	**Appropriate table with 6 months' names and corresponding values in rows/columns**	**2**
	Correct months and values (with/without units) shown in separate columns/rows (must be a table, must be structured in columns and rows, accept with or without borders)	1

Activity 2		Marks
	Columns/rows labelled with suitable titles, for example, 'Month' and 'Cost' (must be a table)	1
2C2	**(£) 120**	**2**
	330 – 210 correct values and subtraction required	1
	CAO (£) 120	1
	Total marks	**15**

Activity 3		Marks
3A	**(£) 699.72 with valid check**	**4**
	7 x 4 (= 28 m^2) or 28 (m^2)	1
	4 x 7 x 24.99 OR 28 x 24.99 FT their area x 24.99 or evidence of	1
	CAO (£) 699.72	1
	Check using reverse calculation, for example, 699.72 / 24.99 = 28, or 28 /7 = 4 FT	1
3B1	**9.3 (metres or m) accept 9 m and 30 cm but not 930 cm**	**3**
	4 – 0.9 OR 400 – 90 OR 3.1 (m) OR 310 (cm) OR 12 – 2.7 (= 9.3)	1
	3.1 x 3 OR 3.1 + 3.1 + 3.1 OR 310 x 3 OR 12 – 2.7 (= 9.3) FT their value x 3 accurately but subtraction required	1
	CAO 9.3 (metres or m) accept 9 m and 30 cm but not 930 cm	1

Activity 3		Marks
3B2	**4**	**2**
	9.3 / 2.4 OR 3.875 seen OR 4 x 2.4 OR 2.4 + 2.4 + 2.4 + 2.4 OR 9.6 seen FT their value from 3B1	1
	4 FT their value from 3B1 (whole number and correct lengths (FT) required)	1
3C	**8**	**2**
	13 / 1.5 seen OR method counting of 1.5 m multiples, for example, 9 x 1.5 = 13.5 OR equivalent	1
	CAO 8 (spaces)	1
	Total marks	**11**

Overall marks	**40**
Pass mark:	**27**

Summary of Skills Standards and Coverage and Range
(Note: where task reference and marks are indicated against a skill standard they can be for any of the associated coverage and range statements)

Skills standards	Total Marks	Required Weighting	Actual Weighting	Coverage and range (can be covered across all skills standards)	Task reference	Marks awarded
Representing **R1** understand practical problems in familiar and unfamiliar contexts and	**14**	**30 - 40 %**	**35%**	**a.** understand and use whole numbers and understand negative numbers in practical contexts **b.** add, subtract, multiply and divide whole numbers using a range of strategies	**2B, 2A1, 1C2, 3A, 3A**	**5**

situations, some of which are non-routine **R2** identify and obtain necessary information to tackle the problem **R3** select mathematics in an organised way to find solutions				**c.** understand and use equivalencies between common fractions, decimals and percentages	**2A2, 2A2,**	**2**
				d. add and subtract decimals up to two decimal places		
				e. solve simple problems using ratio where one number is a multiple of the other	**1B1, 1B1, 1B2, 1B2, 2A1, 2A1**	**6**
				f. use simple formulae expressed in words for one- or two-step operations		
Analysing **A1** apply mathematics in an organised way to find solutions to straightforward practical problems for different purposes **A2** use appropriate checking procedures at each stage	**13**	**30 - 40%**	**32.5%**	**g.** solve problems requiring calculation with common measures, including money, time, length, weight, capacity and temperature	**2A2, 2A3, 2A3, 2B, 3A, 3B1, 3B1, 3B2, 3C, 3B2**	**10**
				h. convert units of measure in the same system	**3A, 3B1**	**2**
				i. work out areas and perimeters in practical situations		
				j. construct geometric diagrams, models and shapes		
Interpreting **I1** interpret and communicate solutions to practical problems, drawing simple conclusions and giving explanations	**13**	**30 - 40%**	**32.5%**	**k.** extract and interpret information from tables, diagrams, charts and graphs	**1A1, 1A1, 1C1, 1C1, 1C2. 2B, 2C1, 2C1, 3C**	**9**
				l. collect and record discrete data and organise and represent information in different ways		
				m. find mean and range	**1C2, 1C2, 2C2, 2C2,**	**4**
				n. use data to assess the likelihood of an outcome	**1A2, 1A2**	**2**
Total marks:	**40**					**40**

Question Type	
Open:	**40 (100%)**
Closed:	**0 (0%)**