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Mark Scheme (Results)

November 2010

Functional Skills

Functional Skills Mathematics Level 1 FSM01

FUNCTIONAL SKILLS (MATHEMATICS)
MARK SCHEME – LEVEL 1 NOVEMBER 2010

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Question	Evidence	Mark	Mark Grid	Notes
Q1 (a)	interprets rule correctly and uses 3 calculates required width	1 or 2	A AB	3×3÷2 4.5
Q1 (b)	Gives valid reason for decision (ft from part a)	1	C	e.g. no, they are too narrow
Total marks for question		**3**		
Q2	understands the problem, considers criteria to place sofa	1 or 2	D DE	2 of: correct width, correct length, suitable position for sofa Sofa is 2cm by 4cm all of : correct width, correct length, suitable position for sofa
	identifies and obtains necessary info to solve problem of table placement	1 or 2	F FG	2 of: correct width, correct length, suitable position for table Table is 2cm by 3cm all of : correct width, correct length, suitable position for table
Total marks for question		**4**		

Question	Evidence	Mark	Mark Grid	Notes
Q3	Works with months or weeks	1	H	TS 98×12(=1176) or FP 72×12(=864) or HS 52×13(=676)
	Adds deposit	1	J	FP '864'+200=(1064) or HS '676'+350(=1026)
	Finds total costs	1	K	All of 1176 and 1064 and 1026
	comparing costs of credit plans	1 or	L	compares two using own figures and makes correct decision
		2	LM	compares all three using own figures and makes correct decision
Total marks for question		**5**		
Q4	identifies correct number of hours	1	N	6 seen, or 6×15(=90) or 122.4(0)
	Finds costs	1 or	P	'6'×15(=90) or 32.4(0) or 122.4(0). '6'≠ 1
		2 or	PQ	At least two of :'90', 32.4(0), '122.4(0)'
	Finds total	3	PQR	£122.40 cao, **correct money notation**
Total marks for question		**4**		

Question	Evidence	Mark	Mark Grid	Notes
Q5 (a)	interprets information supplied **and** describes probability in words	1	A	eg impossible or no chance or cannot happen: **and** shop is not open do **not** accept unlikely, not likely
Q5 (b)	Interprets the given information to produce a data collection sheet	1 or	B	1 of : sandwich types, bread types, efficient input opportunities, or headings alone and input opportunities
		2 or	BC	2 of : sandwich types, bread types, efficient input opportunities,
	organised solution	3	BCD	3 of : sandwich types, bread types, efficient input opportunities,
Q5 (c)	Attempts to calculate hours per week or pay per day	1 or	E	Time calculation ×6 (='2.5'×6=15) **or** time calculation ×5 (='2.5'×5=12.5) where '2.5' = [1.5, 3.5]
	Finds correct total pay	2	EF	75
Total marks for question		**6**		
Q6	Works with number of sandwiches per week **or** cost per day	1 or	G	6×20(=120) or 6 ×40(=240) or 20×58(=1160 or 11.6) or 40×51(=2040 or 20.4)
	Works towards total cost	2 or	GH	6×20×58 (=6960 or 69.6) or 6×40×51(=12240 or 122.4)
	finds correct total costs	3	GHJ	192 or (122.4(0) **and** 69.6(0))
Total marks for question		**3**		

Question	Evidence	Mark	Mark Grid	Notes
Q7 (a)	Appropriate graph would be bar or line graph	1 or 2 or 3	**K** KL KLM	one of: plotting, linear scale, labels two of: plotting, linear scale, labels three of: plotting, linear scale, labels (2mm tolerance for plotting)
Q7 (b)	Writes any simple relevant statement	1	N	Yes, profits are increasing.
Total marks for question		4		
Q8	interprets ratio information correctly applies ratio correctly finds correct quantities	1 or 2 or 3	P PQ PQR	e.g. 1/6 **or** 5/6 seen **or** 6 parts seen or 2 parts orange or 10 parts water e.g. 1/6 × 12 **or** 5/6×12 **or** [6 parts = 12 litres] or 2 parts orange and 10 parts water. 2 litres **and** 10 litres
Total marks for question		3		

Question	Evidence	Mark	Mark Grid	Notes
Q9 (a)	interprets table extracts distances between 3 given places	1 or	A	2.5 **and** 1.5 seen (may be circled in table)
	interprets problem to find either route distance given or distance needed	2 or	AB	2.5+ 1.5(=4) or 10 – '4' It must be clear where '4' comes from e.g. 2.5 and 1.5 may be circled in table **or** 2+4 (=6)
	Finds solution	3	ABC	chooses Windmill from suitable working seen
Q9 (b)	understands problem and uses 500 in rule or begins reverse calc from 30	1 or	D	3×500 (=15or 1500) **or** 30–10 (=20)
	correct cost calculation or correct number of leaflets he can afford	2	DE	(£)25 or 2500(p) **or** (30–10)÷0.03=666…..
	compares and justifies decision	1	F	eg: yes it costs £25 he has £30 to spend **or** yes he has enough money to get more than 600 leaflets printed
Q9 (c)	interprets tally	1 or	G	6 **or** 13 **or** 22 seen
	coordinates both tables	2 or	GH	5.10 **or** 110 seen
		3	GHJ	128.1(0)
Total marks for Question		9		

Q10	understands problem begins to prepare schedule	1 or	K	at least 2 correct times linked to activities **or**
				times or events seen in sequential order (allow one error or omission, for an error in time **ft**)
	improves schedule	2 or	KL	all times linked to activities **and either** • not ordered sequentially **or** • one activity omitted **or** • one error in time (**ft**)
	full schedule	3	KLM	all times correct and linked to activities and ordered sequentially
Total marks for question		3		

Question	Evidence	Mark	Mark Grid	Notes
Q11 (a)	interprets then extracts information	1	N	Table R
Q11 (b)	Works with time	1 or	P	$7 \times 10 = (70)$ or $8 \times 10 = (80)$ or $60+15=(75)$ or 7.5 or $10 \div 1.25 (=8$ km/hour$)$
	compares time.	2 or	PQ	Indicates the upper or lower bound. Lower: eg 70(mins) oe Upper: 80(mins) oe or 7.5(mins) do not credit speed (= 8 km/hour)
	Reaches decision from valid reason	3	PQR	states 8 minutes per km **or** Group D with **valid** working
Total marks for question		4		

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