

Mark Scheme

Sample Assessment Material

Summer 2008

Level 2

Level 2 Functional Skills

Mathematics

FUNCTIONAL SKILLS TEST (MATHEMATICS)
MARK SCHEME – SPECIMEN PAPER
LEVEL 2

No	Answer	Mark	Notes	
1.1	(a) £12000 + £5000 = (b) £14000 + £7000 = (c) £1000 (d) £29000 × .020 =	£17000 £21000 £1000 £5800	1 1 1 2	B1 cao B1 cao B1 cao M1 A1
1.2	$7 \times 9 = 63 \text{ m}^2$ Graph: 63 → 720 (approx) 720 > 500 so OK	Yes with reasons	3	M1 $7 \times 9 (=63)$ M1 attempt to convert using graph A1 >500 stated and shown using evidence (dep on at least M1)
1.3	(a) $1677 \div 3 \times 2 =$ (b) “1118” × £3.75 = (c)	1118 £4192.50 £4200	1 1 1	B1 cao B1 ft B1 ft round to the nearest £100
1.4	(a) $£210000 \div 6 =$ (b) $£40000 \times 6 =$	£35000 £240000	1 2	B1 cao M1 subs into formula $£40000 = T/6$ or processing shown: $£40000 \times 6$ A1 cao
1.5	(a) $1677 - (683+471+139+45) = 1677 - 1338 =$ (b) $(683 \times 2) + (471 \times 1) + (139 \times -1) + (45 \times -2) =$ $1366 + 471 - 139 - 90 = 1608$ (c) $1608 \div 1338 =$ (d)	339 1608 Calculation Reason	1 2 2 1	B1 cao M1 correct processing using points eg sight of $(683 \times 2) + (471 \times 1) + (139 \times -1) + (45 \times -2)$ A1 cao M1 “1608” ÷ “1338” A1 1.2 (or better) B1 eg “People are more likely to want the shop than they are to use it”, “Both means are close to 1 so most people want the shop and will use it”
2.1	(a) $260 - 170 =$ (b) $178 - 78$ (c) eg $(170 \times 178) + (90 \times 100) = 30260 + 9000$ eg $(100 \times 260) + (170 \times 78) = 26000 + 13260$	90 100 39260	1 1 2	B1 cao B1 cao M1 correct processing by dividing area up and identifying dimensions A1 cao

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No		Answer	Mark	Notes
2.2	(a)	$2000 - (178+45+120+57) = 2000-400$	2	M1 correct processing eg $2000 - 178 - 45 - 120 - 57$ A1 cao
	(b)	$\frac{4}{5}$	2	M1 " $\frac{1600}{2000}$ " A1 $\frac{4}{5}$ cao
2.3		D	1	B1 cao
2.4	(a)	45×30	1	B1 cao Accept 30×45
	(b)	$9\text{m} \div 20\text{cm} = 900\text{cm} \div 20\text{cm} =$	2	M1 for conversion of 9m to 900cm A1 45 cao
	©	$200 \times 10\% \rightarrow 220$ " 220 " $\div 25 = 8.8 \rightarrow 9$ packs	3	M1 correct processing to achieve 10% of 200 M1 for division of " 220 " by 25 (or $200 \div 25$) A1 cao
	(d)	"9" $\times 44.5$	2	M1 "9" $\times 44.5$ A1 cao Accept 400.5
2.5		920	1	A1 cao
		161	1	A1 cao
		1081	1	A1 cao

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3.1		Rectangle 6×3.6	2	B1 rectangle length of 6 B1 rectangle width of 3.25 to 3.75 Accept rectangle any orientation
3.2	(a)	$\frac{2}{3}$	2	B2 for $\frac{2}{3}$ (B1 for $\frac{16}{24}$)
	(b)	(24-16)÷2= 8 ÷ 2 = 4 hours	2	M1 for process of (24-16)÷2 or 8÷2 A1 cao
3.3	(a)	Graph	3	B2 for all points plotted accurately (1/4 square tolerance) and joined (B1 points plotted & joined with no more than 2 errors; OR all points plotted accurately but not joined correctly.) B1 for months added to horizontal axis
	(b)	October	1	B1 cao
	(c)	March	1	B1 cao
	(d)	Rejection of mean	2	B2 for a full explanation which includes calculation of the mean with working, and comparison with 40.7 [mean=43.62...] (B1 method shown but no mean calculated, or mean shown but no comparison with 40.7)
	(e)	Median, with justification	2	B1 for stating the median B1 for justification eg 40.7 is the middle value

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3.4	(a)	0.53×360, 0.25×360, 0.22×360	191°, 90°, 79°	3	<p>M1 evidence of method for at least one angle (could be implied by one correct angle of four on pie chart or in the table) A1 All three angles drawn ±2° tolerance, any order. B1 (dep on at least 1 angle drawn correctly, and exactly 4 sectors) for labels (flavour or frequency; initials will do) NB: Ignore the table if the pie chart provides the marks. B1 line drawn between 45% and 50% with correct shading. B1 line drawn at 90% with correct shading in the last rectangle. B1 sensible reason given eg “That’s where the elephants spend most of their time.”</p>
	(b)		% graph	2	
	(c)		Reason	1	

Level 2 COVERAGE: assessment grid

Question	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	3.4
Coverage														
1					x									
2	x	x	x	x	x	x	x	x	x	x				
3	x		x				x		x		x			
4			x					x		x		x		
5									x					
6				x										
7														
8		x				x								
9		x							x			x		
10													x	x
11		x			x								x	x
12					x								x	
13														

