

Mark Scheme - Final Version

January 2009

Functional Skills

Maths Level 1 (FM101/01)
Pilot

General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

FM101/01				
No	Working	Answer	Mark	Notes
1	(a)	9.4	1	B1 cao
	(b)	22.8-22.0 =	1	B1 Accept -0.8 (%)
	(c)	Graph	2	M1 for process of setting up graph; upto to 2 errors in plotting with all joined, or all plotted correctly and not joined. Tolerance: $\pm 1/2$ sq. A1 Allpoints plotted correctly & joined.
	(d)	Reason	2	B2 for a complete description (eg goes up and then goes down); B1 for describing one aspect (eg goes up or down). For B1 ignore any incorrectly quoted figures.
	(e)	$\frac{(10.8+11.1+11.4+11.0+10.0+9.4+8.8+8.5)}{8}$	10.125	2
2	(a)	Line of symmetry	1	B1 for exactly one correct line of symmetry.
	(b)	$2 \times 50 = 100, 3 \times 50 = 150$	2	M1 for the process of $\times 50$ (implied by 100 or 150 seen) A1 for both Length 150 and Width 100
	(c)	Length 150 Width 100 1 : 50, 3:150 oe	1	B1 3:150 or equivalent fit from (b).
3	(a)	$2844 \times 2 =$	2	M1 for sight of 2844 A1 cao
	(b)	$26 \times 270 =$	1	B1 cao
	(c)	$800 \times 2 =$	2	M1 for process of $\times 2$ or $800 + 800$ A1 cao
4	(a)	$24 \times 30 \div 60 =$	2	M1 for $24 \times 30, 24 \times 0.5$, or 720 seen A1 cao
	(b)	$60 - "12" =$	1	B1 for 48 or ft 60 – (a) if (a) < 60

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No	Working	Answer	Mark	Notes
5	(a) (b) (c) (d) (e) Bars of height 2, 8, 6 (f)	3 12 th January 5 th January 2 nd February Graph Conclusion	1 1 1 1 2 1	B1 cao B1 Accept “2 nd week in January” or 12 th B1 Accept “1 st week in January” or 5 th B1 Accept “1 st week in February” or 2 nd NB: for (b), (c), (d) accept 2 nd , 1 st , 5 th , if consistent. M1 for process of drawing graph by showing 3 columns, at least 2 correct heights. A1 Three correct columns, correct heights, correct shading (distinct & linked to key given); allow misplacing by 1 column horiz to right but no gaps between columns. B1 one conclusion eg (bookings are) falling; description of a trend
6	(a) (b) £27190-£11885=	£12000 £15305	1 1	B1 cao B1 cao
7	(100×2) + (32×15×2) = 200 + 960 = or 32×15=480, 480+100=580, 580×2=	£680 or £1160	3	M1 process of calculating either 100×2 or 32×15×2, implied by sight of 200 or 960 or 32×15=480 or +100 (implied by 580) M1 for full process of (100×2)+(32×15) or (100×2)+(32×15×2) or 200+480 or 200+960 A1 £680 or £1160
8	(a) 1+3+1+3 (b) 8×2 + 2 = 18 (c) 8×4=	8 18 32	2 2 2	M1 for process of adding guests to the diagram or attempts to find the perimeter A1 cao M1 for process of adding guests, perhaps shown on a partial diagram indicating more than 5 tables, or sight of 8×2 or attempts to find the perimeter for more than 5 tables A1 cao M1 for groups of 4 indicated, or ×8; need more than 5 tables. A1 cao

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9	EFDACB, EFADCB, EDFACB, EAFDCB	Correct order	2	B2 for all correct (B1 for at least 4 letters placed consecutively)
10	(a) 264153	264153	2	B2 cao (B1 for at least 3 of the order correct)
	(b) $65000+60800+47500=$	£173300 millions	2	B2 for full answer, (B1 if numerically correct but incorrect/omitted £ & millions)
11.	(a)	33-36	1	B1 33-36 inclusive
	(b)		1	B1 ft angle given to nearest material in table, if angle is between 20° & 40°. NB: 55° linked to Mild Steel scores B0
12.	(a)	260°C	1	B1 cao
	(b)	-65°C	1	B1 cao
13.	(a)	£2.99	1	B1 cao
	(b) $2 \times £2.99 =$	£5.98	2	M1 for £2.99 or sight of $\times 2$ or digits 598 A1 cao
	(c) $(3 \times £2.39) + (2 \times £9.99) = £7.17 + £19.98$ $= £27.15$ $£30 - £27.15 = £2.85$	£2.85	3	M1 for process of finding $3 \times 2.39 (=7.17)$ or $2 \times 9.99 (=19.98)$ or 27.15 M1 (dep) for addition of parts and subtraction from £30, or sight of $£30 - "£27.15"$ A1 cao SC: B2 for digits 285
14.	(a) $74.5 - 11.5$	63 g	1	B1 cao
	(b) $24 \times 14.3 =$	343.2 mm or 34.32 cm	2	B2 for correct numerical answer with appropriate units (B1 for correct numerical answer OR appropriate units with approximate answer)

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No	Working	Answer	Mark	Notes	
15.	(a)	(i)	50.01	1	B1 cao
		(ii)	49.99	1	B1 cao
	(b)	$\frac{1}{100}$	$\frac{1}{100}$	1	B1 cao

Total for paper: 60 marks