



**General Certificate of Secondary Education
Practice Paper
Set 4**

Mathematics (Linear) B

Paper 2 Foundation Tier 4365/2F

Mark Scheme

Mark Schemes

Principal Examiners have prepared these mark schemes for practice papers. These mark schemes have not, therefore, been through the normal process of standardising that would take place for live papers.

Copyright © 2012 AQA and its licensors. All rights reserved.

COPYRIGHT

AQA retains the copyright on all its publications. However, registered schools and colleges for AQA are permitted to copy material from this booklet for their own internal use, with the following important exception: AQA cannot give permission to schools or colleges to photocopy any material that is acknowledged to a third party even for internal use within the school or college.

Set and published by the Assessment and Qualifications Alliance.

Glossary for Mark Schemes

GCSE examinations are marked in such a way as to award positive achievement wherever possible. Thus, for GCSE Mathematics papers, marks are awarded under various categories.

- M** Method marks are awarded for a correct method which could lead to a correct answer.
- A** Accuracy marks are awarded when following on from a correct method. It is not necessary to always see the method. This can be implied.
- B** Marks awarded independent of method.
- Q** Marks awarded for quality of written communication. (QWC)
- M Dep** A method mark dependent on a previous method mark being awarded.
- B Dep** A mark that can only be awarded if a previous independent mark has been awarded.
- ft** Follow through marks. Marks awarded following a mistake in an earlier step.
- SC** Special case. Marks awarded within the scheme for a common misinterpretation which has some mathematical worth.
- oe** Or equivalent. Accept answers that are equivalent.
eg, accept 0.5 as well as $\frac{1}{2}$

Paper 2 Foundation Tier

Q	Answer	Mark	Comments						
1	evens	B1							
	unlikely	B1							
	impossible	B1							
	certain	B1							
2(a)	99p and £ 1.10 seen	M1							
	£ 2.09	A1							
2(b)	£ 2.49, £ 1.50 and 45p seen	M1	Allow one error						
	(£)4.44	A1							
	56 p or £0.56	Q1	Strand (i) Correct notation						
3(a)	<table style="display: inline-table; border: none;"> <tr><td> </td><td>5</td></tr> <tr><td> </td><td>6</td></tr> <tr><td> </td><td>9</td></tr> </table>		5		6		9	B3	B2 for all tallies correct B1 for tallies with at least one row correct B1ft for frequencies from their tallies
		5							
		6							
	9								
Fully correct bar chart	B3	Condone no gaps B1 for correct heights B1 for equal width bars B1 for labels on axis							
3(b)									
4(a)	5, 9, 13	B2	B1 for two correct						
4(b)	$4 \times 6 - 3$ or $13 + 4 + 4$ or 17 seen	M1	oe						
	21	A1							
5(a)	4 small squares shaded	B1							
5(b)	<table style="display: inline-table; border: none;"> <tr><td>$\frac{1}{3}$</td><td>$\frac{4}{12}$</td><td>$\frac{8}{24}$</td></tr> </table>	$\frac{1}{3}$	$\frac{4}{12}$	$\frac{8}{24}$	B2	B1 for 1 correct (and 1 or 2 incorrect) B1 for 2 correct (and 1 incorrect) B1 for 3 correct (and 1 incorrect)			
$\frac{1}{3}$	$\frac{4}{12}$	$\frac{8}{24}$							

Q	Answer	Mark	Comments
6	2, 2, 4 then two different numbers greater than 4	B2	B1 For one condition met
7(a)	$2 \times 4 = 3 + 5$	B2	oe B1 For one correct calculation seen eg $2 \times 3 = 6$ or $2 + 3 = 5$ SC1 for $3 \times 3 = 4 + 5$ oe
7(b)	$52 - 34$ or $43 - 25$	B2	B1 For one correct substitution seen eg $54 - 32 = 22$ Allow repeated digits for B1 eg $44 - 32 = 12$
8(a)	Tuesday	B1	Accept 5
8(b)	Friday	B1	Accept -6
8(c)	-2 and -8	B2	B1 For one correct or -5 seen
9(a)	Attempt to count squares	M1	eg numbering of squares or [24, 30] seen
	28	A1	
9(b)	4×3 rectangle drawn	B2	B1 For rectangle with area 12 cm^2 drawn B1 For rectangle with perimeter 14 cm drawn
10	5 sectors, 3 sectors and 2 sectors drawn	B1	
	Sectors correctly labelled	B1	eg W, D, L
11(a)	Correct shading	B2	B1 For one correct (Top left, and third circle on main diagonal)
11(b)	Four correct circles shaded	B2	B1 For two circles shaded with line symmetry

Q	Answer	Mark	Comments
12	[1.5 to 2.2] seen	B1	[5 ft to 7 ft]
	Their $[1.5 \text{ to } 2.2] \times 5$	M1	Their $[5 \text{ ft to } 7 \text{ ft}] \times 5$
	[7.5, 11]	A1ft	[25 to 35]
	metres	B1	feet
13	$9 \times 5 (= 45)$	M1	
	Their $45 - 3$	M1	
	42	A1	
14	$120 \times 6 \times 2$	M1	
	Their 120×46	M1	oe
	5520	A1	
	(£) 55.20	B1ft	
15(a)	-8	B1	
	4	B1	
15(b)	Fully correct straight ruled line	B2	B1 For at least three of their points plotted correctly
16	Fully correct using arcs	B3	B2 For fully correct, no arcs B1 For 1 line correct length or eg $300 \text{ m} = 6 \text{ cm}$ $400 \text{ m} = 8 \text{ cm}$
17(a)	650×1.15	M1	
	747.5	A1	
17(b)	$184 \div 1.15$	M1	
	160	A1	

Q	Answer	Mark	Comments
18	1 gallon = 4.5 litres or better seen or implied	B1	oe
	$36 \div \text{their } 4.5$	M1	
	Their 8×30	M1	
	240	A1	
19	$\frac{75}{100} \times 120$	M1	oe
	90 seen or their $90 \times 80 (p)$	M1	oe
	£72	A1	oe
	$90 - \text{their } 72 (= 18)$	M1	
	$18 \div 30$	M1	
	60 p	A1	Accept £0.60
20	$x - 2 + 2x + 1 + x - 2 + 2x + 1$	M1	oe
	$6x - 2 = 43$	M1	oe Need not be simplified
	$6x = 43 + 2$	M1	Collecting terms
	7.5	A1	oe
	Fully correct method shown for solving their equation	Q1	Strand (ii)
21	Two columns and two rows	B1	
	At least 0, 1, 2	B1	
	Two-way table drawn with all possibilities exhausted	B1	

Q	Answer	Mark	Comments
22	$6x - 2x$ or $13 - 5$	M1	
	$4x = 8$	A1	
	2	A1ft	
23(a)	$\frac{1}{2} - \frac{1}{3}$ or $\frac{2}{3} - \frac{1}{2}$ or $\frac{1}{6}$	M1	oe
	Add $\frac{1}{6}$	A1	
23(b)	$\frac{5}{6}$	B1	
24	$360 \div 5$ or 540 seen	M1	
	180 – their 72 or $540 \div 5$	M1	
	Their 108 ($\div 2$)	M1	
	54	A1	
25(a)	$15 < h \leq 20$	B1	
25(b)	Mid values seen 2.5, 7.5, 12.5, 17.5, 22.5	M1	Allow one error
	$\sum fx$ seen	M1	At least one correct product $2.5 \times 31 (= 77.5)$ $7.5 \times 34 (= 255)$ $12.5 \times 54 (= 675)$ $17.5 \times 63 (= 1102.5)$ $22.5 \times 68 (= 1530)$
	Their $3640 \div 250$	M1	
	14.56 or 14.6	A1	Accept 15 with working shown

Q	Answer	Mark	Comments
26(a)	$\frac{1}{2} (65 + 38) 80$	M1	
	4120	A1	
26(b)	Their 4120×110	M1	
	453200	A1	
27	$180 - 133$ or 47	M1	
	86 + their 47	M1	
	$180 - 133 = 47$	M1	
	2 angles are 47 therefore isosceles	A1	