



General Certificate of Secondary Education

Mathematics 4360

Unit 1 Foundation Tier 43601F

Mark Scheme

Specimen Paper

Mark Schemes

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

Further copies of this Mark Scheme are available to download from the AQA Website: www.aqa.org.uk

Copyright © 2009 AQA and its licensors. All rights reserved.

The Assessment and Qualifications Alliance (AQA) is a company limited by guarantee registered in England and Wales 3644723 and registered charity number 1073334.
Registered address AQA, Devas Street, Manchester M15 6EX

Dr Michael Cresswell Director General.

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.
- M dep** A method mark dependent on a previous method mark being 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 $\frac{1}{2}$
- eeoo** Each error or omission.

Unit 1 Foundation Tier

Q	Answer	Mark	Comments
1(a)	No and reference to 10 being 50%	B1	Accept 70% is 14 correct
1(b)	Yes and $75\% > 70\%$	B1	Accept 75% is 15 correct or $\frac{3}{4} = 75\%$
1(c)	$70 \times 20 \div 100$	M1	$70 \div 5$
	14	A1	
2(a)	Valid reason	B1	eg, new issues out
2(b)	Evidence of calculating total for men or women	M1	Women $38 + 17 + 22 + 9$ Men $39 + 11 + 14 + 18$
	Correct total for men (82) and women (86)	A1	
	Valid conclusion Yes as $86 > 82$ No as $86 \approx 82$	Q1	Strand (ii)
3(a)	SS, SG, GS, GG	B2	B1 For 2 or 3 correct (ignore repetitions)
3(b)	Numerator of 2	B1	Must have a fraction
	Denominator of 6	B1	
4(a)	$\frac{6}{6 + 69 + 25}$	M1	$\frac{6}{100}$
	$\frac{3}{50}$	A1	
4(b)	31	B1	
4(c)(i)	Unlikely	B1	
4(c)(ii)	Certain	B1	

Q	Answer	Mark	Comments
5(a)	$400 + 400 + 300 (= 1100)$	M1	
	Total £ 1100	A1	
	10% of 1100 = 110	B1	
	$990 = 1100 - £ 110$	B1	oe
5(b)	$642.60 - 630$	M1	
	Their $12.6 \div 630$	M1	
	2	A1	
6	Σ boys scores $12 + 18 + 12 + 19 + 9 + 20 + 11 + 9 + 18 + 12$	M1	= 140
	(Mean =) 14	A1	
	Boys range = 11	B1	
	Conclusion using data comparing mean and range with all information clearly and coherently organised	Q2	Strand (iii) eg, girls are better as mean higher and range about same There is no difference as means and ranges about the same Q1 partial conclusion or lack of clarity
7(a)	(3), (5), (7), 9, 11 (5), 7, 9, 11, 13 7, 9, 11, 13, 15 9, 11, 13, 15, 17	B2	-1 eooo
7(b)	$\frac{3}{20}$	B1	oe
7(c)	$P(13) = \frac{3}{20}$ implies 15 winners in 100 plays	B1	Award partial marks for stages shown
	(Chocolate costs) £ 7.50	B1	
	(Takings) $100 \times 20 (= £ 20)$	B1	
	(Profit) $£ 20 - £ 7.50 (= £ 12.50)$	B1	

Q	Answer	Mark	Comments
8(a)	Sheet with 10 rows or columns and a section for distance and fare	B2	Deduct a mark if not complete
8(b)	Longer taxi rides always cost more and cost per mile should be about same	B1	oe
8(c)(i)	£ 4.60 - £ 5.00	B1	
8(c)(ii)	Line of best fit	M1	Fares about double distance
	14	A1	ft Their line of best fit
8(d)	Yes, positive correlation	B1	Accept: No, correlation is weak positive
9(a)(i)	Too vague	B1	oe
9(a)(ii)	Not enough choices or choices overlap	B1	oe
9(b)	Response section that covers values from 0 to at least 5 with no missing values and no overlapping values	B1	
9(c)(i)	Too small a sample or other sensible reason	B1	eg, may not have anyone whose surname begins with X or Z
9(c)(ii)	Method 2, all patients have equal chance	B1	
10(a)	$\sum xf (3 \times 0 + 4 \times 4 + 5 \times 4 + 6 \times 9 + 7 \times 8 + 8 \times 5)$	M1	
	186	A1	
	6.2	A1 ft	ft Their total \div 30 if M1 awarded
10(b)(i)	Reference to cumulative totals for French (1, 5, 13, 21, 30)	M1	eg, 'I added the frequencies'
	5	B1	
10(b)(ii)	5 Spanish level 5 and 6 17 French level 5 and 6	B1	Lots of zeros in top right hand of table The numbers above zero are on or below the leading/main diagonal