

AQA Qualifications

## AQA Level 2 Certificate FURTHER MATHEMATICS

Level 2 (8365)

Mark Scheme Miscellaneous Our specification is published on our website (<a href="www.aqa.org.uk">www.aqa.org.uk</a>). We will let centres know in writing about any changes to the specification. We will also publish changes on our website. The definitive version of our specification will always be the one on our website, this may differ from printed versions.

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## Glossary for Mark Schemes

eg, accept 0.5 as well as  $\frac{1}{2}$ 

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

М	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.
В	Marks awarded independent of method.
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.



## Miscellaneous

Question	Answer	Mark	Comments
1	$(x = 0, y = 8 \Rightarrow) \ a = 8$	M1	
	$1 = 8 \times b^{-3}$	M1	
	b = 2	A1	
	$y = 2^3 \times 2^x$	A1	must see both lines
	$= 2^{x+3}$		
2	3×?×?×?	M1	
	3 × 4 × 3 × 2 or 72	M1	
	5 × 4 × 3 × 2 or 120	M1	oe
	192	A1	
3	LHS or LHS numerator	M1	Allow one error
	$6n^2 + 17n + 12 + 30n$		
	RHS 9n <sup>2</sup> + 12n	M1	
	$0 = 3n^2 - 35n - 12$	M1	oe
	(3n+1)(n-12)	M1	
	12	A1	

Question	Answer	Mark	Comments		
4	$4x^5 - 2x^3 - 2x^3 + x$	M1	At least two terms correct		
	$4x^5 - 4x^3 + x = x + 4x^5 + 108$	M1			
	$4x^3 = -108$	M1	oe		
	<b>–</b> 3	A1			
5 $4a^3 5x$ and $6a^2 5^2 x^2$ M2 M1 for each					
3	$4a^3.5x$ and $6a^2.5^2x^2$ $4a^3.5 = 3 \times 6a^2.5^2$		WIT TOT GACIT		
		M1			
	22.5	A1			