

Centre Number						Candidate Number				
Surname										
Other Names										
Candidate Signature										

For Examiner's Use	
Examiner's Initials	
Pages	Mark
2-3	
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14	
TOTAL	



General Certificate of Secondary Education  
Higher Tier  
November 2012

# Mathematics

43602H

## Unit 2

Thursday 8 November 2012 1.30 pm to 2.45 pm

H

<p><b>For this paper you must have:</b></p> <ul style="list-style-type: none"> <li>mathematical instruments.</li> </ul> <p>You must <b>not</b> use a calculator.</p>	
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### Time allowed

- 1 hour 15 minutes

### Instructions

- Use black ink or black ball-point pen. Draw diagrams in pencil.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book.

### Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 66.
- The quality of your written communication is specifically assessed in Questions 3 and 16. These questions are indicated with an asterisk (\*).
- You may ask for more answer paper and graph paper. These must be tagged securely to this answer book.

### Advice

- In all calculations, show clearly how you work out your answer.



N 0 V 1 2 4 3 6 0 2 H 0 1

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Answer **all** questions in the spaces provided.

- 1 (a) Multiply out  $8(y + 3)$

$$8y + 24$$

Answer  $8y + 24$  (1 mark)

- 1 (b) Factorise  $4x - x^2$

$$x(4 - x)$$

Answer  $x(4 - x)$  (1 mark)

- 2 On Sunday I earn £50 more than on Saturday.  
Altogether I earn £600.

Work out how much I earn on Saturday.

Let  $x$  = earnings for Saturday.

Then earnings for Sunday =  $x + 50$  and total

earnings is given by  $x + x + 50 = 600 \Rightarrow 2x + 50 = 600$   
 $\Rightarrow x = \frac{600 - 50}{2} = 275$

Answer £  $275$  (3 marks)

