


Centre Number						Candidate Number				
Surname										
Other Names										
Candidate Signature										

For Examiner's Use	
Examiner's Initials	
Pages	Mark
3	
4 – 5	
6 – 7	
TOTAL	

GCSE Mathematics (Non-calculator Paper)

Practice Paper Style Questions Topic: Simultaneous Equations (Higher Tier)

<p>For this paper you must have:</p> <ul style="list-style-type: none"> • black pen • HB pencil • ruler (with cm & mm) • rubber • protractor • compass • pencil sharpener 	
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Time allowed

- 1 hour

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 space provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work that you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is **26**.
The quality of your written communication is specifically assessed in questions indicated with an asterisk (*)
- You may ask for more answer paper and graph paper.
These must be tagged securely to this answer booklet.
- A calculator must NOT be used.

Advice

- Read each question carefully before you answer it.
- In all calculations, show clearly how you work out your answer.
- Check your answers if you have time at the end.

There are no questions printed on this page

**DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED**

1 Solve the simultaneous equations:

$$2x + 3y = 3$$

$$3x - 4y = 13$$

$$x = \dots\dots\dots (2 \text{ marks})$$

$$y = \dots\dots\dots (2 \text{ marks})$$

2 Solve the simultaneous equations:

$$6x + 2y = -1$$

$$4x - 2y = 6$$

$$x = \dots\dots\dots$$

$$y = \dots\dots\dots$$

(Total 3 marks)

3 Solve the simultaneous equations:

$$x^2 + y^2 = 13$$

$$y = 2x + 1$$

$$x = \dots\dots\dots y = \dots\dots\dots$$

$$\text{or } x = \dots\dots\dots y = \dots\dots\dots$$

(Total 6 marks)

4 Solve the simultaneous equations:

$$4x + y = -2$$

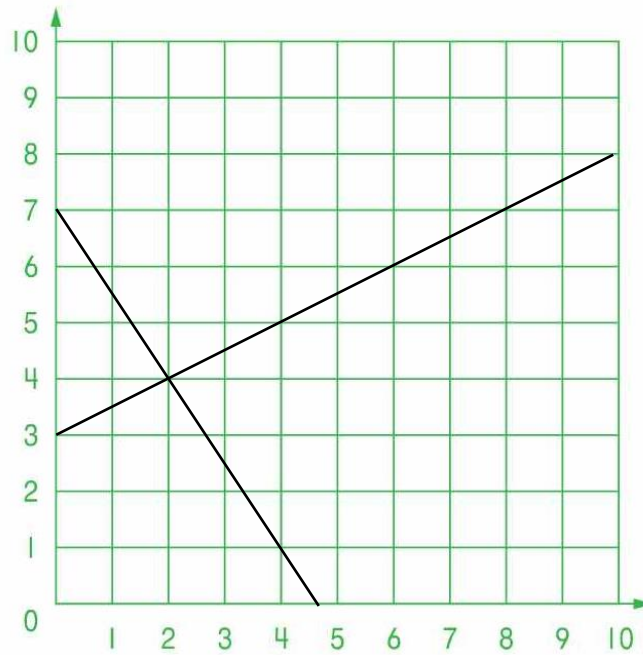
$$4x - 2y = 7$$

$$x = \dots\dots\dots$$

$$y = \dots\dots\dots$$

(Total 3 marks)

- 5 This diagram show graphs of $y = \frac{1}{2}x + 3$ and $2y + 3x = 14$



- (a) Use the **diagram** to solve the simultaneous equations:

$$y = \frac{1}{2}x + 3$$

$$2y + 3x = 14$$

$$x = \dots\dots\dots$$

$$y = \dots\dots\dots$$

(1 mark)

- (b) Find an equation of the straight line which is parallel to the line $y = \frac{1}{2}x + 3$

Answer (2 marks)

6 Solve the simultaneous equations:

$$6x + 3y = -3$$

$$4x - 2y = 6$$

$$x = \dots\dots\dots (2 \text{ marks})$$

$$y = \dots\dots\dots (2 \text{ marks})$$

7 Solve the simultaneous equations:

$$4x - y = 13$$

$$2x + 3y = -4$$

$$x = \dots\dots\dots$$

$$y = \dots\dots\dots$$

(Total 3 marks)

END OF QUESTIONS

There are no questions printed on this page

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