

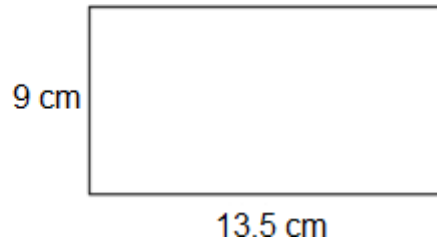
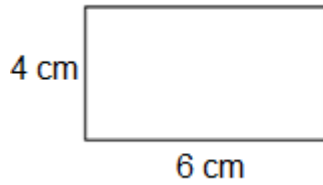
Name: \_\_\_\_\_

BennettMaths AQA 2H – Part 2

- 12** Show that these two rectangles are similar.

**[2 marks]**

Not drawn  
accurately




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- 13** A factory packs  $x$  boxes of plasters per hour.  
Each box contains 100 plasters.

Show that the factory packs  $\frac{5x}{3}$  plasters per minute.

**[2 marks]**

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Turn over for the next question

**14**

A company has 113 employees.

Information about their hourly rates of pay is shown in the table.

Hourly rate, £ $p$	Number of employees
$8 \leq p < 12$	56
$12 \leq p < 20$	28
$20 \leq p < 40$	17
$40 \leq p < 60$	12
	Total = 113

The owner of the company uses the data to make two statements.

**Statement A**

“Over 35% of employees have an hourly rate that is more than £16”

**Statement B**

“The average hourly rate of pay is more than £18”

**14 (a)** Show working that supports **Statement A**.

**[3 marks]**

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**14 (b)** Why might **Statement A** not be true?

**[1 mark]**

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**14 (c)** Work out an estimate of the mean to support **Statement B**.

**[3 marks]**

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**14 (d)** Why is the mean **not** the best average to represent the data?

**[1 mark]**

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**Turn over for the next question**

**15** Expand  $(a^2 - 7ab)(3a + 2b)$

**[2 marks]**

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Answer \_\_\_\_\_

**16** Line A  
has equation  $y = ax - 5$   
passes through the point (9, 22)

Line B has equation  $2y - 5x = 7$

Show that line A has a greater gradient than line B.

**[3 marks]**

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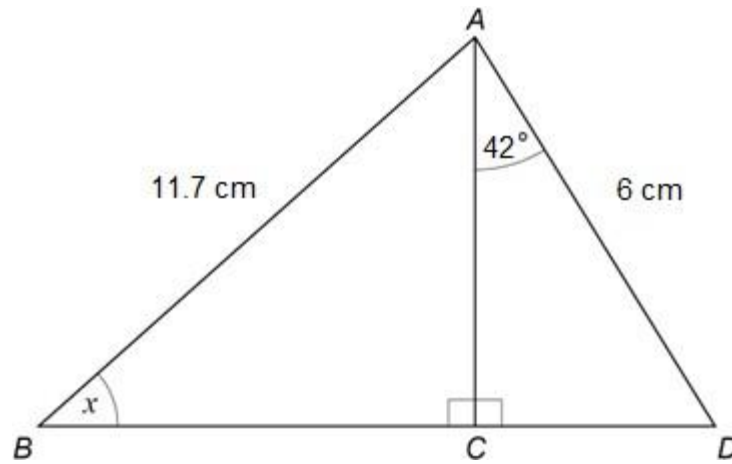
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Not drawn accurately



**[4 marks]**

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

$x =$  \_\_\_\_\_

18

Rearrange  $z = \frac{xy + 4}{x}$  to make  $x$  the subject.

**[3 marks]**

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Answer \_\_\_\_\_

6      24      52      90

**[4 marks]**

Answer \_\_\_\_\_