



Surname _____

Other Names _____

Centre Number _____

Candidate Number _____

Candidate Signature _____

I declare this is my own work.

Functional Skills Level 2

MATHEMATICS

Paper 1 Non-Calculator

8362/1

Monday 13 January 2020

Morning

Time allowed: 30 minutes

At the top of the page, write your surname and other names, your centre number, your candidate number and add your signature.

[Turn over]



For this paper you must have:

- mathematical instruments.
- You must **NOT** use a calculator.



INSTRUCTIONS

- Use black ink or black ball-point pen. Draw diagrams in pencil.
- Answer **ALL** questions.
- You must answer the questions in the spaces provided. Do not write on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.
- State the units of your answer where appropriate.



INFORMATION

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 20.
- You may ask for more answer paper, graph paper and tracing paper. These must be tagged securely to this answer book.

ADVICE

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

DO NOT TURN OVER UNTIL TOLD TO DO SO



SECTION A

Answer ALL questions in the spaces provided.

1 Here are nine numbers.

1 2 2 4 6 7 7 7 9

Work out the median.

Circle your answer. [1 mark]

5 6 7 8



- 2 Put the following numbers in order, starting with the SMALLEST.

5 -9 -2 7 -6 1

[2 marks]

Answer

_____, _____, _____, _____, _____, _____

- 3 Circle the value of $4y^2$ when $y = -3$ [1 mark]

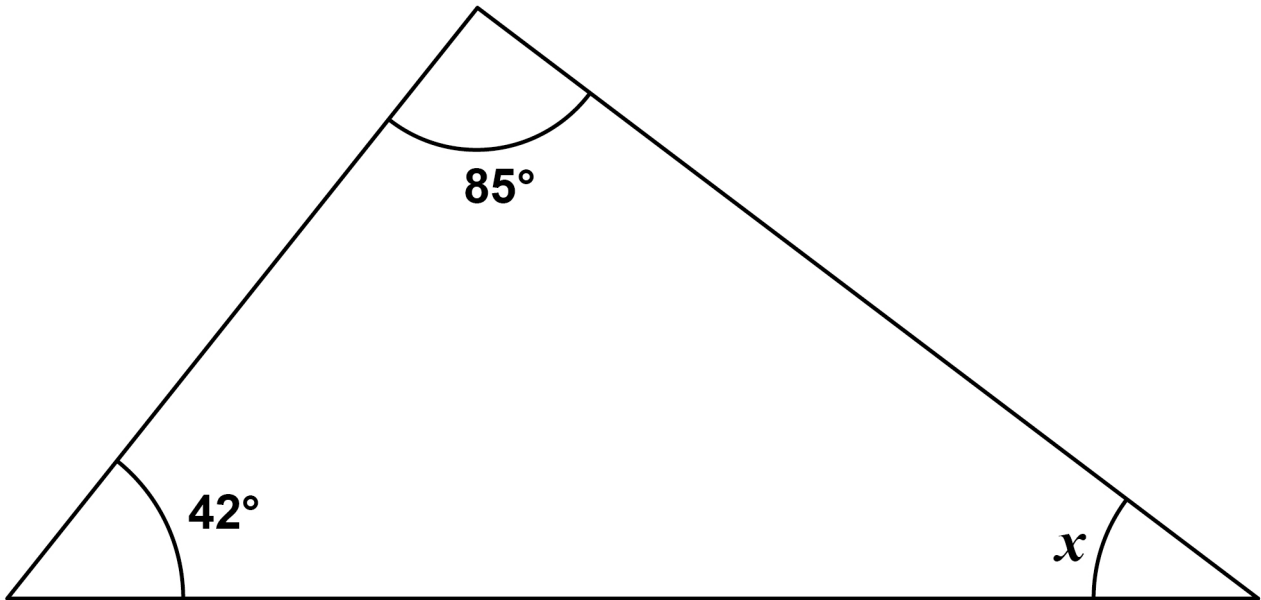
-144 -36 36 144

[Turn over]



4 Work out the size of angle x . [2 marks]

The diagram is not drawn accurately.



Answer _____^o



5 Work out $61 - 4 \times 2^3$ [2 marks]

Answer

[Turn over]

8



SECTION B

Answer ALL questions in the spaces provided.

6 FITNESS

Laura has a company with 16 employees.

Each employee has a device that records

- **how many steps they take each day**
- **their resting heart rate.**



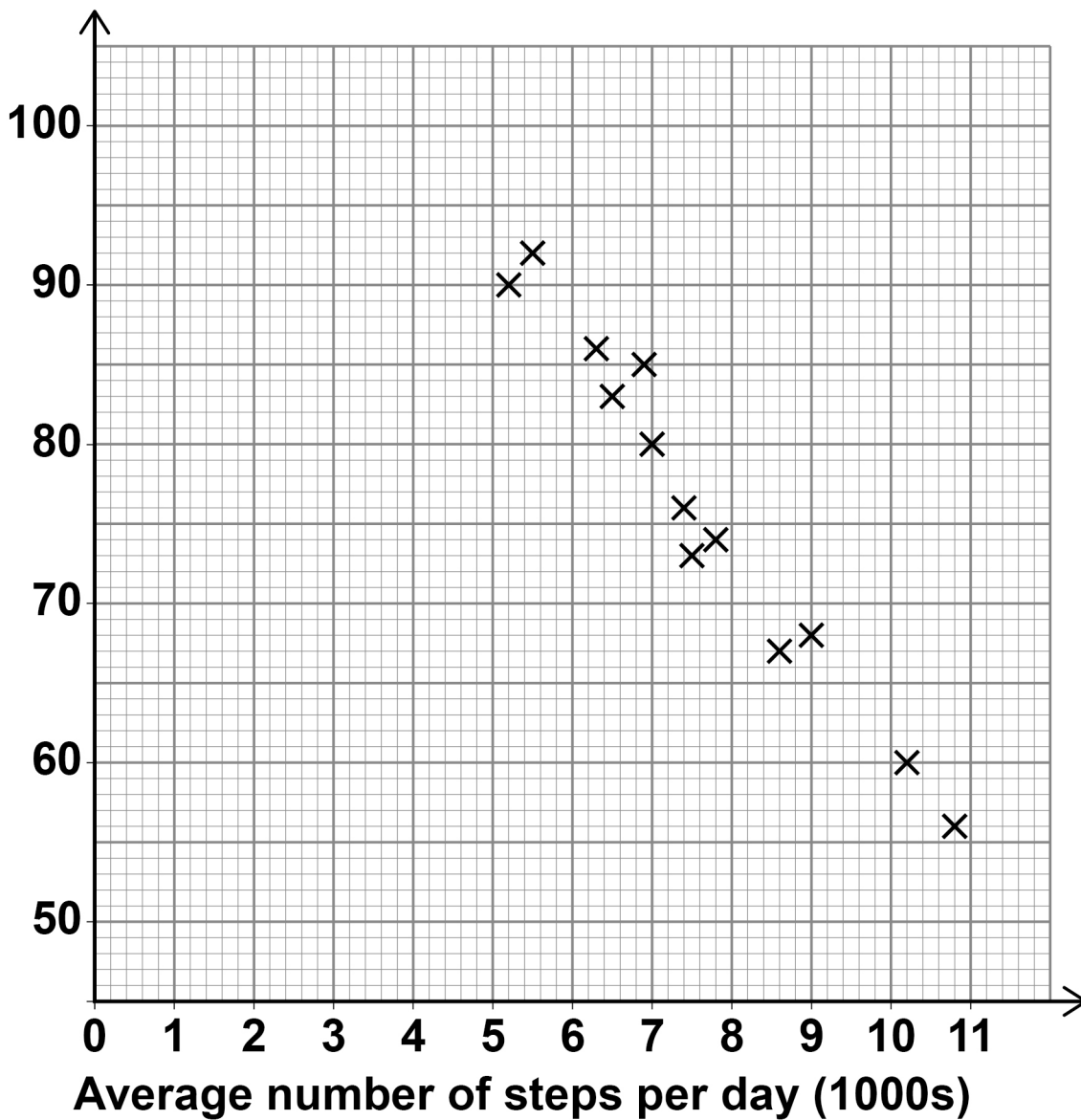
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[Turn over]



- 6 (a) The scatter diagram represents the data for 13 of the employees.

Average
resting
heart rate
(beats per
minute)



The table shows the extra data for the other 3 employees.

Average number of steps per day	Average resting heart rate (beats per minute)
3600	96
3400	100
3100	99

Laura takes an average of 4000 steps per day.

Use the scatter diagram **WITH THE EXTRA DATA** to estimate Laura's average resting heart rate.

Give the units of your answer.

You **MUST** show your working, which should be on the diagram. [5 marks]

Answer _____

[Turn over]



- 6 (b) In total, the 16 employees had 70 days of sick leave last year.

Each day of sick leave costs the company £130
Laura thinks that increasing the wellbeing of the employees may reduce the number of days of sick leave.

She pays for gym membership for the 16 employees.

The cost for each employee is £15 per MONTH.

Laura says,

“If the number of days of sick leave is reduced by 40% we will save over £750 per YEAR after paying for the gym membership.”

Is she correct?

You MUST show your working. [7 marks]



END OF QUESTIONS

12



Additional page, if required.

Write the question numbers in the left-hand margin.

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Additional page, if required.

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For Examiner's Use	
Question	Mark
1–5	
6	
TOTAL	

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1 8



2 0 1 A 8 3 6 2 / 1