

Name: _____

Maths Genie Stage 3

Test B

Instructions

- Use **black** ink or ball-point pen.
- Answer all questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- You must **show all your working out.**
- **Calculators may be used.**



Information

- The marks for each question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end

1 Write 23% as a fraction.

.....
(Total for Question 1 is 1 mark)

2 Write 0.79 as a percentage.

..... %
(Total for Question 2 is 1 mark)

3 Solve $7g = 42$

$g =$
(Total for Question 3 is 1 mark)

4 Ava wants to buy as many chocolate bars as she can.

She has £5 to spend on chocolate bars.

Each chocolate bar costs £0.42

Work out how much change Ava will get from £5.

£.....
(Total for Question 4 is 3 marks)

5 Use your calculator to work out $\frac{\sqrt{15.6 - 4.32}}{3.78^2}$

(a) Write down all the figures on your calculator display.

.....
(2)

(b) Write your answer to part (a) correct to 2 decimal places.

.....
(1)

(Total for Question 5 is 3 marks)

6 $v = u + at$

$$u = 3$$

$$a = 10$$

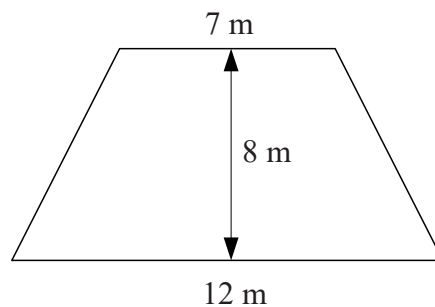
$$t = 6$$

Work out the value of v .

$v =$

(Total for Question 6 is 2 marks)

7 The diagram shows a garden in the shape of a trapezium.



Find the area of the garden.

.....
(Total for Question 7 is 3 marks)

8 Solve $25 - m = 11$

$m =$

(Total for Question 8 is 1 mark)

9 Here are the weights, in grams, of 6 potatoes

137 123 107 125 151 146

(a) Work out the range.

.....
(1)

(b) Work out the median weight.

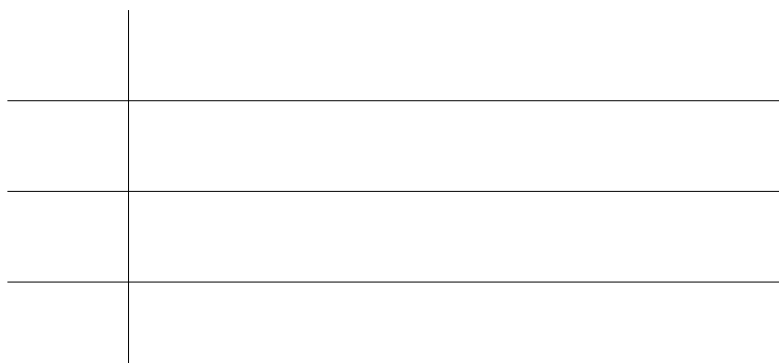
..... g
(2)

(Total for Question 9 is 3 marks)

10 Here are the times, in seconds, it took 20 people to run a race.

62 79 69 61 86 73 82 52 59 82
64 74 55 71 63 80 76 66 53 63

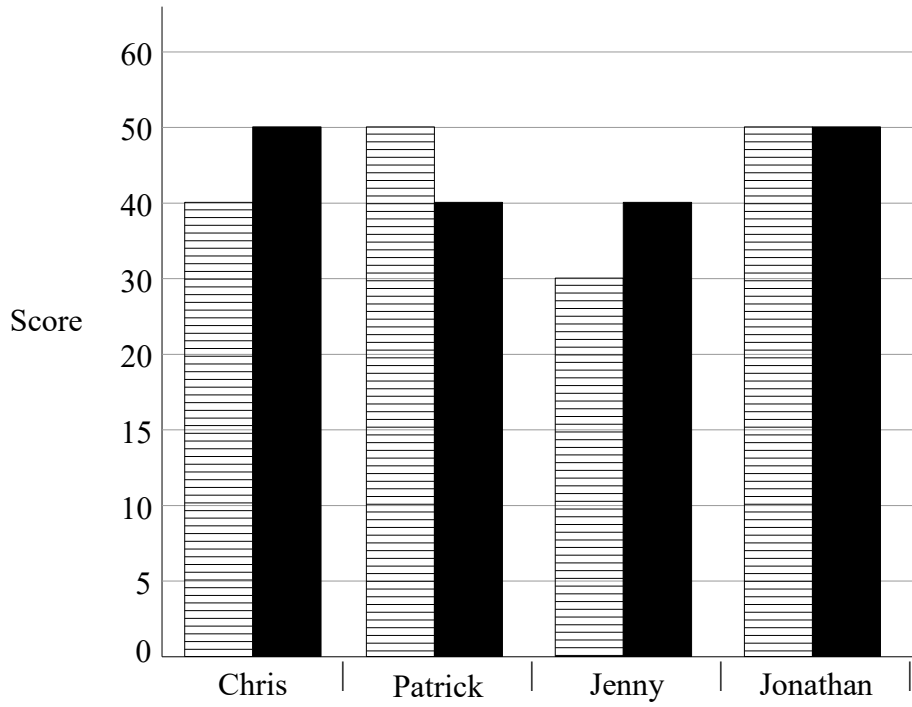
Draw an ordered stem and leaf diagram to show this information.



Key:

(Total for Question 10 is 3 marks)

11 Here is a bar chart showing the scores of five students in their Maths and Science tests.

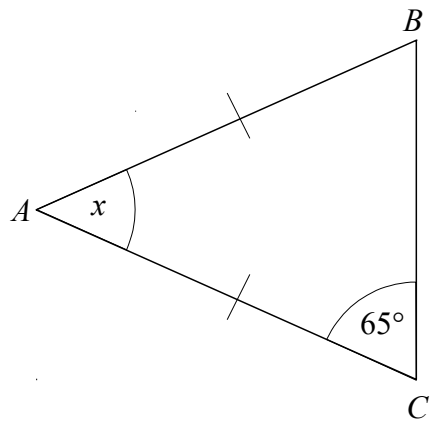


Write down two things wrong with this graph.

- 1
- 2

(Total for Question 11 is 2 marks)

12 ABC is an isosceles triangle Work out the size of the angle marked x .



(Total for Question 12 is 2 marks)