

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

# Maths Genie Stage 2

## Test C

### 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 not 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 8464 to the nearest thousand.

8000

(Total for Question 1 is 1 mark)

2 Write 5.7248 correct to 3 decimal places.

5.725

(Total for Question 2 is 1 mark)

3 (a) Simplify  $5p \times 6q$

30pq

(1)

(b) Simplify  $10a + 4b - 6a - 9b$

1 mark for 4a, 1 mark for -5b

4a - 5b

(2)

(Total for Question 3 is 3 marks)

4 There are 11 pens in a box.

5 pens are red.

4 pens are blue.

2 pens are green.

One pen is selected at random from the box.

(a) Write down the probability that pen is green.

$\frac{2}{11}$

(1)

(b) Write down the probability that pen is black.

0

(1)

(Total for Question 4 is 2 marks)

5 Work out  $359 \times 6$

$$\begin{array}{r} 359 \\ \times \quad 6 \\ \hline 2154 \end{array}$$

1 mark for just 1 error

2154

(Total for Question 5 is 2 marks)

6 Work out  $250 - 74 - 37$

$$\begin{array}{r} 1 \quad 14 \quad 10 \\ \cancel{2} \quad \cancel{5} \quad 0 \\ - \quad 74 \\ \hline 176 \end{array}$$

$$\begin{array}{r} 6 \quad 1 \\ 176 \\ - 37 \\ \hline 139 \end{array}$$

1 mark for just 1 error

139

(Total for Question 6 is 2 marks)

7 Work out  $\pounds 6.35 + \pounds 19.48$

$$\begin{array}{r} 6.35 \\ + 19.48 \\ \hline 25.83 \end{array}$$

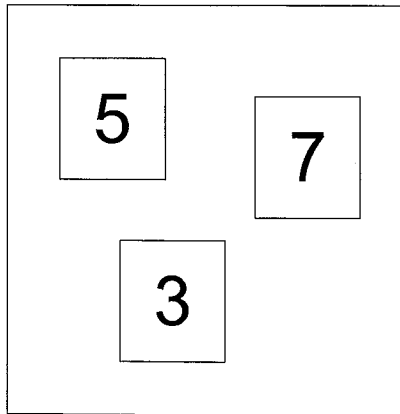
1 mark for just 1 error

£ 25.83

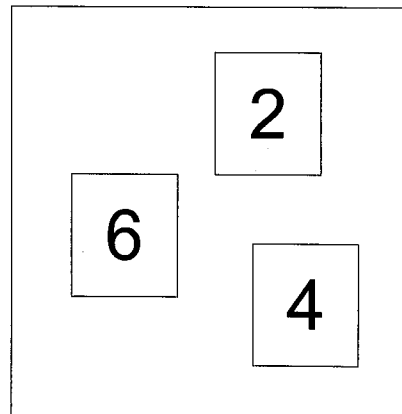
(Total for Question 7 is 2 marks)

- 8 There are three cards in box A and three cards in box B.  
There is a number on each card.

Box A



Box B



Harry takes a card from box A and a card from box B.

- (a) Write down all the possible combinations of cards Harry can take.

$5, 2$        $7, 2$        $3, 2$   
 $5, 6$        $7, 6$        $3, 6$   
 $5, 4$        $7, 4$        $3, 4$

1 mark for just 1 error (2)

Harry adds the numbers on the two cards to get a total score.

- (b) Work out the probability that the total score is greater than 10.

$7$        $9$        $5$   
 $11$        $13$        $9$   
 $9$        $11$        $7$

$$\frac{3}{9}$$

(1)

(Total for Question 8 is 3 marks)

or  $1/3$  or any equivalent fraction,  
decimal or percentage

9 Work out  $118.3 \div 0.7$

7  
14  
21  
28  
35  
42  
49  
56  
63  
70

$$\frac{118.3}{0.7} = \frac{1183}{7}$$

$$7 \overline{) 1183} \begin{array}{r} 0169 \\ \underline{7} \phantom{0000} \\ 11 \phantom{000} \\ \underline{7} \phantom{000} \\ 48 \phantom{00} \\ \underline{35} \phantom{00} \\ 13 \phantom{00} \\ \underline{91} \phantom{00} \\ 39 \phantom{00} \\ \underline{28} \phantom{00} \\ 11 \phantom{00} \\ \underline{70} \phantom{00} \\ 40 \phantom{00} \\ \underline{28} \phantom{00} \\ 12 \phantom{00} \\ \underline{70} \phantom{00} \\ 50 \phantom{00} \\ \underline{35} \phantom{00} \\ 15 \phantom{00} \\ \underline{14} \phantom{00} \\ 1 \phantom{00} \end{array}$$

1 mark for just 1 error

169

(Total for Question 9 is 2 marks)

10 Pens are sold in packs and boxes.  
There are 8 pens in a pack.  
There are 50 pens in a box.

Write an expression for the total number of pens in  $p$  packs and  $b$  boxes.

1 mark for  $8p$ , 1 mark for  $50b$

$$8p + 50b$$

(Total for Question 10 is 2 marks)