Name: _____

Maths Genie Stage 2

Test A

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 2623 to the nearest thousand.

3000

(Total for Question 1 is 1 mark)

2   Write 7.84 correct to 1 decimal place.

7.8

(Total for Question 2 is 1 mark)

3   There are 41 counters in a bag.

18 of the counters are red.
The rest of the counters are blue.

One of the counters is taken at random.

Find the probability that the counter is blue.

$$\begin{array}{r} {\scriptstyle 3} \\ \not{4}{}^{1}1 \\ -\ 1\ 8 \\ \hline 2\ 3 \end{array}$$ 1 mark for 23

$\dfrac{23}{41}$

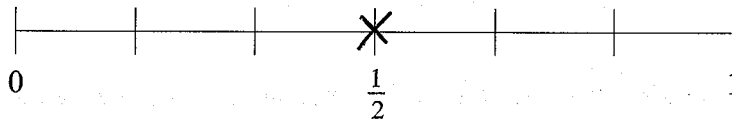**(Total for Question 3 is 2 marks)**

4   Work out 2572 + 309 + 84

$$\begin{array}{r} 2\ 5\ 7\ 2 \\ 3\ 0\ 9 \\ +\ \ \ 8\ 4 \\ \hline 2\ 9\ 6\ 5 \end{array}$$

1 mark for just 1 error

2965

(Total for Question 4 is 2 marks)

5 An ordinary dice is thrown. On the probability scale mark with a cross (X) the probability that the dice lands on an even number.

0          $\frac{1}{2}$ 1

(Total for Question 5 is 1 mark)

6 Potatoes are sold for £2 per kilogram.
Write an expression for the price of x kilograms of potatoes.

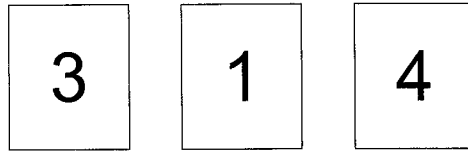£ _2x_

(Total for Question 6 is 1 mark)

7 Work out 54×39

$$
\begin{array}{r}
5\ 4 \\
\times\ 3\ 9 \\
\hline
4\ \overset{3}{8}\ 6 \\
1\ 6\ 2\ 0 \\
\hline
2\ 1\ 0\ 6
\end{array}
$$

1 mark for just 1 error

_2 1 0 6_

(Total for Question 7 is 2 marks)

8   Here are three number cards

$$\boxed{3} \quad \boxed{1} \quad \boxed{4}$$

Write down all the possible three-digit numbers that can be made using the cards.

314   134   431

341   143   413

1 mark for just 1 error

(Total for Question 8 is 2 marks)

9   Mason is *x* years old.
Phil is two years older than Mason.
Write an expression for Phil's age.

$x + 2$

(Total for Question 9 is 1 mark)

10   (a) Simplify $7 \times a \times 3$

$21a$

(1)

(b) Simplify $5x - 3y - 8x + 6y$

$-3x + 3y$

1 mark 3y, 1 mark for -3x

$3y - 3x$

(2)

(Total for Question 10 is 3 marks)

11 Work out $61 - 36.8$

$$
\begin{array}{r}
5{}^{1}0{}^{1}0 \\
6\!\!\!/\ 1\!\!\!/.\ 0 \\
-\ 3\ 6\ .\ 8 \\
\hline
2\ 4\ .\ 2
\end{array}
$$

1 mark for just 1 error

$\underline{24.2}$

(Total for Question 11 is 2 marks)

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12 Work out $40.8 \div 0.6$

6
12
18
24
30
36
42
48
54
60

$$\frac{40.8}{0.6} = \frac{408}{6}$$

$$
\begin{array}{r}
0\ 6\ \ 8 \\
6\ \overline{)\ 4\ {}^{4}0\ {}^{4}8}
\end{array}
$$

1 mark for just 1 error

$\underline{6\ 8}$

(Total for Question 12 is 2 marks)