

Name: _____

Maths Genie Stage 1

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 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 Work out $20 - 2 \times 7$

$$20 - 14$$

6

(Total for Question 1 is 1 mark)

2 Write down the value of $\sqrt{64}$

8

(Total for Question 2 is 1 mark)

3 Here is a list of numbers

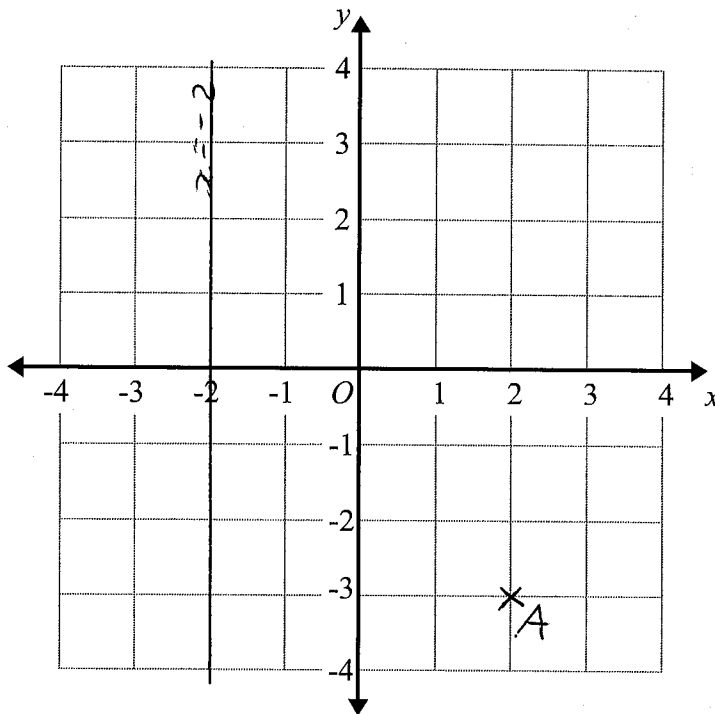
6 12 15 21 3^3 36 4^3 80

From the list, write down all the cube numbers.

27 and 64

(Total for Question 3 is 1 mark)

4



(a) Plot the point with coordinates (2, -3).
Label this point A.

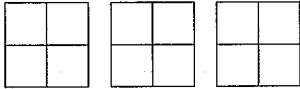

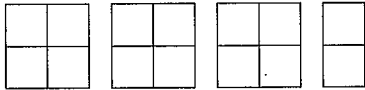
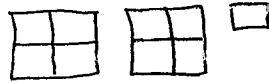
(1)


(b) On the grid, draw the line with equation $x = -2$

(1)

(Total for Question 4 is 2 marks)

- 5 The pictogram shows information about the number of plants sold by a shop on Monday, Tuesday and Wednesday.

Monday		12
Tuesday		10
Wednesday		14
Thursday		9

Key:	
	Represents 4 plants

- (a) Write down the number of plants sold ~~in~~ ^{on wednesday}

..... 14

(1)

9 plants were sold on Thursday.

- (b) Show this information on the pictogram. (1)

- (c) What was the total number of books sold on these four days?

$$12 + 10 + 14 + 9$$

(1)

$$12 + 10 + 14 + 9 = 45$$

..... 45

(2)

(Total for Question 5 is 4 marks)

- 6 Write the following numbers in order of size.
Start with the smallest number.

206 187 211 171 182

171 182 187 206 211

(Total for Question 6 is 1 mark)

- 7 Here is a list of numbers.

10 11 12 13 14 15 16 17 18 19

From the numbers on the list,

- (a) write down a square number

16

(1)

- (b) write down a multiple of 8

16

(1)

- (c) write down all of the prime numbers on the list.

11, 13, 17 and 19

(1)

(Total for Question 7 is 3 marks)

- 8 Natalie drives from London to Sheffield.

Natalie leaves London at 11.30 am.

Natalie drives for $2\frac{1}{4}$ hours before stopping for a break.

The break lasts for 25 minutes.

Natalie then takes another 75 minutes to reach Sheffield.

What time does Natalie arrive in Sheffield?

Any correct
time calculation
①

11.30 ↓ 2 hours
13.30 ↓ 15 mins
13.45
14.00 ↓ 15 mins
14.10 ↓ 10 mins
15.00 ↓ 50 mins
15.25 ↓ 25 mins

3.25 pm or 15.25

(Total for Question 8 is 2 marks)

- 9 The table shows the temperature at midnight and midday on February 28th 2018 in four cities.

City	Midnight Temperature	Midday Temperature
Madrid	3 °C	11 °C
Munich	-11 °C	-7 °C
Budapest	-9 °C	-5 °C
Rome	-4 °C	6 °C

- (a) Write down the name of the city with the lowest midnight temperature.

Munich
(1)

- (b) Which city had the greatest rise in temperature from midnight to midday?

Rome
(1)

- (c) At midnight, how many degrees colder was Rome than Madrid?

7 °C
(1)

(Total for Question 9 is 3 marks)

- 10 Write the following fractions in order of size.
Start with the smallest fraction.

$$\frac{1}{2} \quad \frac{3}{10} \quad \frac{2}{5} \quad \frac{1}{3} \quad \frac{7}{15}$$
$$\frac{15}{30} \quad \frac{9}{30} \quad \frac{12}{30} \quad \frac{10}{30} \quad \frac{14}{30}$$

$$\frac{3}{10} \quad \frac{1}{3} \quad \frac{2}{5} \quad \frac{7}{15} \quad \frac{1}{2}$$

(Total for Question 10 is 2 marks)