



CANDIDATE NAME										
CENTRE NUMBER						CANDIDATE NUMBER				

Secondary 2
MATHEMATICS

Paper 1

You must answer on the question paper.

09/8/24

August 2024

1 hour

INSTRUCTIONS

- Answer **all** questions.
- Use the black or dark blue pen.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided
- Do **not** use an erasable pen or correction fluid.
- You should show all your working in the booklet.
- You are **not** allowed to use a calculator.

INFORMATION

- The total mark for this paper is 50.
- The number of marks for each question or part question is shown in brackets [].

For Teacher's Use	
Page No.	Marks
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
Total	

This document has 11 pages. Any blank pages are indicated.

1. Write one of the signs

< > =

to complete each statement.

$$0.8 \times 10^2 \dots\dots\dots 8$$

$$400 \times 10^{-2} \dots\dots\dots 40$$

[1] ☐

2. Tick (✓) to show whether each of these statements is true or false.

	True	False
$15^2 = 225$	<input type="checkbox"/>	<input type="checkbox"/>
$\sqrt{518} = 72$	<input type="checkbox"/>	<input type="checkbox"/>
$5^3 = \sqrt{125}$	<input type="checkbox"/>	<input type="checkbox"/>

[1] ☐

3. Work out.

$$\left(1 - \frac{3}{5}\right) \div \left(1 - \frac{5}{9}\right)$$

..... [2] ☐

4. Here are some ratios.

A	B	C	D
12mm: 1.5 cm	40cm: 0.6 m	800g: 1kg	400m: 0.6km

Write each ratio in the correct position in the table.

One has been done for you.

Ratios equivalent to 4 : 5	Ratios equivalent to 2: 3
A	

[2]

5. Look at the numbers in the box.

π	$\frac{4}{7}$	1.367
$\sqrt[3]{8}$	$\sqrt{27}$	3. $\dot{1}$

Draw a ring around all the irrational numbers.

[2]

6. (a) The population of Myanmar is about 55 000 000.

Write this population in standard form.

.....[1]

- (b) The mass of an ant 0.000 002 923 kg.

Write this mass in standard form.

.....kg [1]

7. Write this ratio in its simplest form.

0.5 m : 25 cm

..... : [1]

8. Draw a ring around the numbers that are written in standard forms.

9.00×10^{13}

16×10^{-7}

2.1×10^1

2.92×10^{-8}

2×100^3

8.67×10^{-43}

[2]

9. Work out.

$$\frac{2}{5} \times \left(\frac{5}{6} - \frac{2}{3} \right)$$

Give your answer as a fraction in its simplest form.

.....[2]

10. Write a number in each box to make each statement correct.

$$8^0 = \boxed{}$$

$$8^{13} \div 8^4 = 8^{\boxed{}}$$

[2]

11. (a.) A scientist writes the number 870 000 000 in standard form.

Draw a ring around the correct answer.

$$8.7 \times 10^7$$

$$86 \times 10^7$$

$$8.7 \times 10^8$$

$$8.7 \times 10^9$$

[1]

(b.) The scientist measures the width of a human hair as 0.000 043m.

Write this number in standard form.

.....m [1]

12. Work out.

$$4\frac{2}{3} - 2\frac{2}{3} + \frac{1}{3}$$

Give your answer as a fraction in its simplest form.

.....[2]

13. Write a number in the box to make statement correct.

$$\sqrt{85} = \boxed{} . 2195\dots$$

[1]

14. Strawberries cost \$6.60 per kilogram.

Anna buys 0.55 kg of mangos.

Calculate how much Anna's strawberries will cost.

\$.....[2]

15. Show that $\sqrt{25} \times \sqrt{9}$ is an integer.

..... [2]

16. What is the inequality showing the limits on x , where x is

(a) 450 to the nearest tens

..... [1]

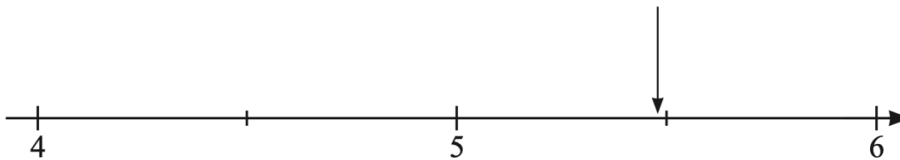
(b) 57. 3 to one decimal place.

..... [1]

(c) 45 000 to the nearest thousand.

..... [1]

17. The arrow points to a number.



Draw a ring around the round the number the arrow points to.

$\sqrt{11}$ $\sqrt{22}$ $\sqrt{30}$ $\sqrt{35}$

[1]

18. Dave is 160cm tall.

The ratio of Lim's height to Dave's height is 8 : 7.

Work out how many centimetres taller Dave **is than** Lim.

.....cm [2]

19. Kim, Tina and Ron share \$ 180. The amount of Kim and Tina get are in the ratio 2:3.
The amount of Tina and Ron get are in the ratio of 6:8.

Find how much Ron gets.

\$ [2]

20. Work out

$$240 \div (5 \times 4^2 - 20)$$

.....[1]

21. Draw a ring around the best estimate of each surd.

a. $\sqrt{52}$	5	6	7	8
b. $\sqrt{15}$	3.0	3.3	3.6	3.9
c. $\sqrt[3]{72}$	4.2	4.6	7.6	7.8

[3]

22. Draw a ring around the fractions that have recurring decimal equivalents.

$$\frac{6}{40}$$

$$\frac{5}{6}$$

$$\frac{17}{40}$$

$$\frac{3}{16}$$

$$\frac{5}{18}$$

$$\frac{11}{55}$$

[2]

23. Draw a line to match each statement with the correct calculation.

The population of a village is 150.
The population decreases by 15% each year.
Find the population after 5 years.

The mass of a tree is 150 kg.
The mass increases by 5% each year.
Find the mass of the tree after 15 years.

The value of an antique is \$150.
The value increases by 15% every 5 years.
Find the value after 25 years.

The cost of a new type of mobile phone is \$150.
The cost decreases by 5% each month.
Find the cost after 15 months.

$$150 \times 1.15^5$$

$$150 \times 0.95^{15}$$

$$150 \times 1.05^{15}$$

$$150 \times 0.85^5$$

[2]

24. Lindiwe and Mai share some sweets in the ratio 5:2.

Lindiwe gets 15 more sweets than Mai.

Find the number of sweet Mai gets.

.....[2]

25. Write 42.567

a) Correct to two decimals places,

..... [1]

b) Correct to one significant figure

..... [1]

26. Write a value in the box to make this statement correct.

$$28 \times 10 = 28 \div \boxed{}$$

[1]

27. a. Write $5^3 \times 5^4$ as a power of 5.

.....[1]

b. Write $6^3 \div 6^6$ a power of 6.

.....[1]

28. Here are two inequality symbols.



Write the correct inequality symbol in each box to complete these statements.

12.62×0.91 12.62

$12.62 \div 0.91$ 12.62

$0.91 \div 12.62$ 12.62

[1]