

**Calculations – 2024 Checkpoint Primary Math****1. 2024/Paper 1\_stage 6/No.1**

Work out.

$5342 \times 2 =$

10 684

$$\begin{array}{r}
 5342 \\
 \times \quad 2 \\
 \hline
 10684
 \end{array}$$

[1]

**2. 2024/Paper 1\_stage 6/No.2**Write down the number that is one thousand times bigger than 10.42

$= 10.42 \times 1000$

$$\begin{array}{r}
 1042 \\
 \hline
 1000
 \end{array}
 \times 1000$$

$= 10420$

.....10 420 [1]

## 3. 2024/Paper 1\_stage 6/No.6

Work out.

$$\begin{array}{r}
 256 \div 8 \\
 \underline{32} \\
 8 \overline{) 256} \\
 \underline{-24} \phantom{0} \\
 16 \\
 \underline{-16} \\
 0
 \end{array}$$

..... 32 ..... [1]

## 4. 2024/Paper 1\_stage 6/No.8

A box of cereal has a mass of 1.85 kilograms.

A hotel uses 8 boxes of cereal each week.

Write the total mass of cereal the hotel uses each week.

$$\text{Total mass} = 8 \times 1.85$$

$$= 8 \times \frac{185}{100}$$

$$\begin{array}{r}
 64 \\
 185 \\
 \times 8 \\
 \hline
 1480
 \end{array}$$

$$= \frac{1480}{100}$$

$$= \frac{148}{10}$$

$$= 14.8 \text{ kg}$$

..... 14.8 kilograms [1]

## 5. 2024/Paper 1\_stage 6/No.12

(a) Calculate.

BODMAS

$$\begin{aligned}
 &2 \times (4 + 1) \\
 &= 2 \times 5 \\
 &= 10
 \end{aligned}$$

.....10 [1]

(b) Write one pair of brackets to make this calculation correct.

$$(2 + 4) \times 3 = 18$$

$$18 = 6 \times 3$$

[1]

## 6. 2024/Paper 1\_stage 6/No.14

Write a digit in the box to make the statement correct.

$$5.4 - 1.117 = 6.6 - 2.3 \boxed{1} 7$$

$$\begin{array}{r}
 5.400 \\
 - 1.117 \\
 \hline
 4.283
 \end{array}$$

$$\begin{array}{r}
 6.600 \\
 - 4.283 \\
 \hline
 2.317
 \end{array}$$

 $\therefore$  Missing digit = 1

[1]

7. 2024/Paper 1\_stage 6/No.16

Tick (✓) **four** numbers with a total of  $-3.142$ 

|       |      |     |   |      |        |         |          |
|-------|------|-----|---|------|--------|---------|----------|
| 0.001 | 0.01 | 0.1 | 1 | -1   | -0.1 ✓ | -0.01   | -0.001   |
| 0.002 | 0.02 | 0.2 | 2 | -2   | -0.2   | -0.02   | -0.002 ✓ |
| 0.003 | 0.03 | 0.3 | 3 | -3 ✓ | -0.3   | -0.03   | -0.003   |
| 0.004 | 0.04 | 0.4 | 4 | -4   | -0.4   | -0.04 ✓ | -0.004   |
| 0.005 | 0.05 | 0.5 | 5 | -5   | -0.5   | -0.05   | -0.005   |

[1]

JLES 2024

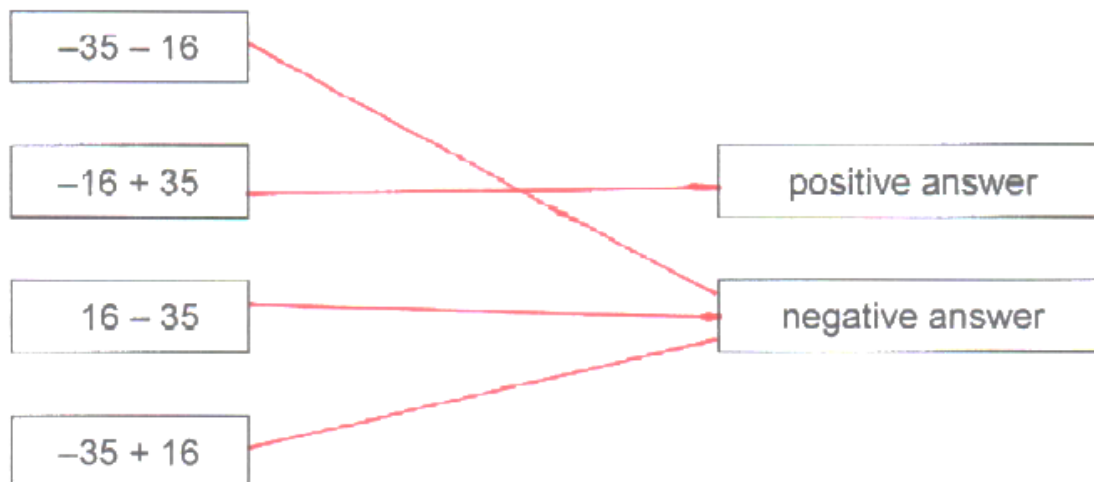
$$\begin{array}{r}
 -3.000 \\
 + -0.100 \\
 -0.040 \\
 -0.002 \\
 \hline
 -3.142
 \end{array}$$

M/S6/01

[Turn over]

## 8. 2024/Paper 1\_stage 6/No.19

Draw a line to match each calculation to the correct label.



[1]

## 9. 2024/Paper 1\_stage 6/No.25

Four children calculate  $531 \times 6$ 

Here are their methods.

|        |                                           |                                     |
|--------|-------------------------------------------|-------------------------------------|
| Ahmed  | $500 \times 6 + 30 \times 6 + 1$          | <input type="checkbox"/>            |
| Rajiv  | $531 + 531 + 531 + 531 + 531 + 531 + 531$ | <input type="checkbox"/>            |
| Mike   | $500 \times 6 + 31 \times 6$              | <input checked="" type="checkbox"/> |
| Oliver | $531 \times 2 \times 3$                   | <input checked="" type="checkbox"/> |

Tick (✓) all the methods that will give the correct answer.

[1]

$$\begin{array}{r} 531 \\ \times 6 \\ \hline 3186 \end{array}$$

Ahmed:  $500 \times 6 + 30 \times 6 + 1$   
 $= 3000 + 180 + 1$   
 $= 3181$

Rajiv:  $\begin{array}{r} 531 \\ + 531 \\ \hline 1062 \\ + 531 \\ \hline 1593 \end{array}$   $\begin{array}{r} 1593 \\ + 531 \\ \hline 2124 \\ + 531 \\ \hline 2655 \end{array}$   $\begin{array}{r} 2655 \\ + 531 \\ \hline 3186 \\ + 531 \\ \hline 3717 \end{array}$

Mike:  $500 \times 6 + 31 \times 6$   
 $= 3000 + 186$   
 $= 3186$

$$\begin{array}{r} 31 \\ \times 6 \\ \hline 186 \end{array}$$

Oliver:  $531 \times 2 \times 3$

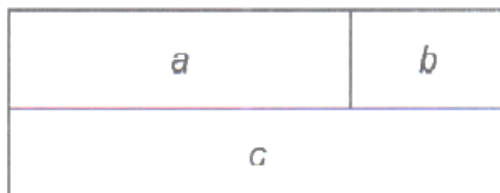
$$\begin{array}{r} 531 \\ \times 2 \\ \hline 1062 \\ \times 3 \\ \hline 3186 \end{array}$$

## 10. 2024/Paper 1\_stage 6/No.28

Gabriella has three blocks.

The two shorter blocks fit **exactly** on top of the longest block.

Here is a diagram of the blocks.



$a$ ,  $b$  and  $c$  represent the lengths of each of the blocks in centimetres.

Tick (✓) the correct statement about the diagram.

$$a + b = c$$

$$b = c - a$$

$$a = b + c$$

☐

$$a - b = c$$

☐

$$a + c = b$$

☐

$$b = c - a$$

☒

[1]

## 11. 2024/Paper 1\_stage 6/No.31

Yuri is making a model of his garden.

The fence in his garden is 16 metres long.

The fence in his model is 80 centimetres long.

The height of the tallest tree in his garden is 6 metres.

Write the height of the tallest tree in his model.

$$\frac{16}{16} : \frac{80}{16} = 5$$

$$1 : 5$$

1m represents 5cm

$$\begin{aligned} \text{Height of the model} &= 5 \times 6 \\ &= 30 \text{ cm} \end{aligned}$$

.....30 centimetres [1]

## 12. 2024/Paper 2\_stage 6/No.19

The table shows information about the highest and lowest temperatures recorded in Ottawa in 2021.

| Month    | Highest temperature | Lowest temperature | Difference       |
|----------|---------------------|--------------------|------------------|
| January  | $-5^{\circ}$        | $-14^{\circ}$      | $-5 - (-14) = 9$ |
| February | $-3^{\circ}$        | $-10^{\circ}$      | $-3 - (-10) = 7$ |
| March    | $2^{\circ}$         | $-7^{\circ}$       | $2 - (-7) = 9$   |
| April    | $11^{\circ}$        | $1^{\circ}$        | $11 - 1 = 10$    |
| May      | $19^{\circ}$        | $8^{\circ}$        | $19 - 8 = 11$    |
| June     | $24^{\circ}$        | $12^{\circ}$       | $24 - 12 = 12$   |

Write the names of the two months which have the same difference between their highest and lowest temperatures.

..... January ..... and ..... March ..... [1]

## 13. 2024/Paper 2\_stage 6/No.20

Mia has a 5 kilogram bag of potatoes.  
She uses 1 kilogram of the potatoes.

Write the percentage of the bag of potatoes that is left.

$$\text{Remainder} = 5 - 1 = 4$$

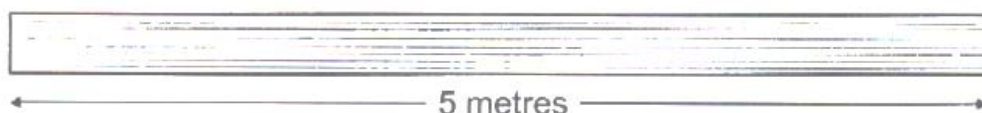
$$\text{Percentage} = \frac{4}{5} \times 100\%$$

$$1 = 4 \times 20\% = 80\%$$

..... 80 % [1]

## 14. 2024/Paper 2\_stage 6/No.21

Jamila builds a fence using some pieces of wood.  
The length of each piece of wood is 5 metres.



Jamila uses  $1\frac{1}{4}$  pieces of wood to build her fence.

(write  $1\frac{1}{4}$  as an improper fraction)

Calculate the **total** length of wood she uses to build her fence.

$$1\frac{1}{4} = \frac{1 \times 4 + 1}{4} = \frac{4 + 1}{4} = \frac{5}{4}$$

$$4 \overline{) 25} = 6\frac{1}{4}$$

LES 2024

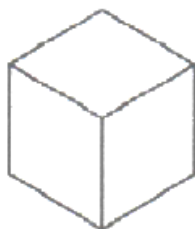
$$\frac{5}{4} \text{ of } 5 = \frac{5}{4} \times 5 = \frac{25}{4}$$

M/S6/02

.....  $6\frac{1}{4}$  metres [1]

## 15. 2024/Paper 2\_stage 6/No.22

A cube has a surface area of  $96 \text{ cm}^2$ .



Write the area of one face of the cube.

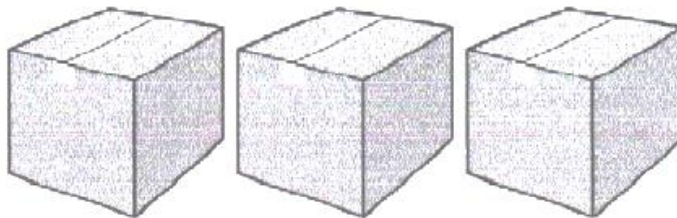
A cube has 6 faces

$$\begin{aligned} \text{Area of one face} &= \frac{\text{Surface area}}{\text{Number of faces}} \\ &= \frac{96}{6} = 16 \text{ cm}^2 \end{aligned}$$

.....  $16 \text{ cm}^2$  [1]

## 16. 2024/Paper 2\_stage 6/No.24

- Mike packs some books into 3 boxes.  
Each book has a mass of 542 grams.  
He packs 24 books in each box.



Mike estimates the total mass of his books.

Write a number in the box to complete the calculation Mike could use to **estimate** the total mass of his books.

Not actual value

Estimate of 542 g

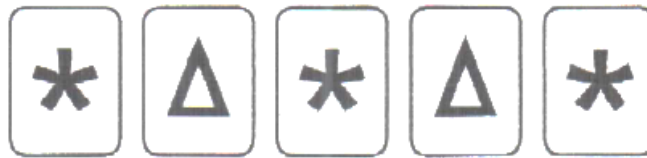
≈ 500 g or 600 g

$$25 \times 3 \times \boxed{500} \text{ or } 600$$

[1]

## 17. 2024/Paper 2\_stage 6/No.31

Here are five cards.



$*$  and  $\Delta$  each represent a different number on the cards.

The sum of all five numbers on the cards is 14

Write a pair of possible values for  $*$  and  $\Delta$

$$* = \underline{2 \text{ or } 4} \text{ and } \Delta = \underline{4 \text{ or } 1} \quad [1]$$

$$3* + 2\Delta = 14 \quad \Rightarrow \quad \begin{aligned} 14 &= 6 + 8 \\ 14 &= 12 + 2 \end{aligned}$$

$$\begin{aligned} 3* &= 6 \quad \text{or} \quad 3* = 12 \\ * &= \frac{6}{3} = 2 \quad \text{or} \quad * = \frac{12}{3} = 4 \end{aligned}$$

$$\begin{aligned} 2\Delta &= 8 \quad \text{or} \quad 2\Delta = 2 \\ \Delta &= \frac{8}{2} = 4 \quad \text{or} \quad \Delta = \frac{2}{2} = 1 \end{aligned}$$