

2024

P6 WA1 MATH

NAN HUA

PRIMARY SCHOOL

DETAILED SOLUTIONS

Detailed solutions are crafted following the methods taught at Thinker Education and are offered as a guiding reference. Any logically sound mathematical answers are accepted.

To obtain the blank question paper for your child to attempt, please Whatsapp us at 9831 9770.



DETAILED SOLUTIONS



Nan Hua Primary School
Primary 6 Mathematics
Term 1 Non-Weighted Assessment 2024
Paper 1

Name: _____ ()

Class: Primary 6M____

Date: _____

Duration: 25 min

Marks	
Section A:	/6
Section B:	/12
Total:	18

Parent's Signature

INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the space provided.
2. Do not turn over the page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Use dark blue or black ball point pen to write your answers in the space provided for each question.
6. Do not use correction tape/ fluid/ highlighter.
7. The use of calculators is NOT allowed.

This booklet consists of 7 printed pages and 1 blank page.

Section A

Questions 1 to 4 carry 1 mark each. Question 5 carries 2 marks.
For each question, four options are given. One of them is the correct answer.
Make your choice (1, 2, 3 or 4) and write your answer in the brackets.

(6 marks)

Topic : Fractions

1 Arrange the following fractions from the greatest to the smallest.

$$\frac{3}{4}, \frac{4}{5}, \frac{5}{6}$$

- | | <u>Greatest</u> | | <u>Smallest</u> |
|-----|-----------------|-----------------|-----------------|
| (1) | $\frac{4}{5}$, | $\frac{3}{4}$, | $\frac{5}{6}$ |
| (2) | $\frac{5}{6}$ ✓ | $\frac{4}{5}$, | $\frac{3}{4}$ ✓ |
| (3) | $\frac{3}{4}$, | $\frac{5}{6}$, | $\frac{4}{5}$ |
| (4) | $\frac{4}{5}$, | $\frac{5}{6}$, | $\frac{3}{4}$ ✓ |

$$\frac{3 \times 15}{4 \times 15}, \frac{4 \times 12}{5 \times 12}, \frac{5 \times 10}{6 \times 10}$$

$$\frac{45}{60}, \frac{48}{60}, \frac{50}{60}$$

Smallest

greatest

(2)

Topic : Fractions

2 Express $2\frac{6}{25}$ as a decimal.

- (1) 2.06
(2) 2.24
(3) 2.25
(4) 2.60

$$2\frac{6}{25} = 2\frac{24}{100} = 2.24$$

(2)

Topic : Fractions

3 What is $\frac{5}{12} \times \frac{3}{2}$?

(1) $\frac{1}{3}$

(2) $\frac{4}{7}$

(3) $\frac{5}{8}$

(4) $1\frac{1}{4}$

$$\begin{aligned} & \frac{5}{12} \times \frac{3}{2} \\ &= \frac{15 \div 3}{24 \div 3} \\ &= \frac{5}{8} \end{aligned}$$

(3)

Topic : Fractions

4 $\frac{2 \times 4}{3 \times 4} - \frac{\boxed{?}}{12} = \frac{1 \times 3}{4 \times 3}$
 $\frac{8}{12} - \frac{\boxed{5}}{12} = \frac{3}{12}$
 What is the missing number?

(1) 1

(2) 5

(3) 3

(4) 1

(2)

Topic : Percentage

- 5 A handbag cost \$250. Kelly bought the bag and was given a 20% discount. She had to pay 8% GST on the discounted price.

How much did she pay for the handbag inclusive of the GST?

(1) \$180 Price after discount = $\frac{80}{100} \times 250$
= 200

(2) \$184

(3) \$216 Price after GST = $\frac{108}{100} \times 200$

(4) \$220

= 216

(3)

Section B

Questions 6 to 9 carry 1 mark each. Questions 10 to 13 carry 2 marks each. Write your answers in the spaces provided.

For questions which require units, give your answers in the units stated.

(12 marks)

Topic: Fractions

- 6 Find the value of $\frac{5}{6} \times 2$. Express your answer as a mixed number in the simplest form.

$$\begin{aligned}\frac{5}{6} \times 2 &= \frac{10}{6} \\ &= 1\frac{4}{6} \\ &= 1\frac{2}{3}\end{aligned}$$

Ans: 1 $\frac{2}{3}$ **Topic: Fractions**

- 7 The product of two fractions is $\frac{3}{8}$. One of the fractions is $\frac{1}{2}$. What is the other fraction?

$$\begin{aligned}\frac{1}{2} \times \boxed{\frac{3}{4}} &= \frac{3}{8} \quad \text{or} \quad \frac{3}{8} \div \frac{1}{2} = \frac{3}{8} \times \frac{2}{1} \\ &= \frac{6}{8} \\ &= \frac{3}{4}\end{aligned}$$

Ans: $\frac{3}{4}$

Please do not write in the margin.

Topic: Fractions

- 8 $\frac{2}{3}$ of a pie was distributed equally among 5 boys. What fraction of the whole pie did each boy receive?

$$\begin{aligned}\frac{2}{3} \div 5 \\ &= \frac{2}{3} \times \frac{1}{5} \\ &= \frac{2}{15}\end{aligned}$$

Ans: $\frac{2}{15}$

Topic: Fractions

- 9 Mrs Tan has 4 kg of flour. She needs $\frac{1}{5}$ kg of flour to bake a cake.

How many of such cakes can she bake?

$$\begin{aligned} & 4 \div \frac{1}{5} \\ &= \frac{4}{1} \times \frac{5}{1} \\ &= 20 \end{aligned}$$

Ans : 20 cakes

Topic: Percentage

- 10 Some students attended a concert at a school auditorium. 40% of the students who attended the concert were girls. There were 168 boys who attended the concert. How many students attended the concert altogether?

G	B	Total
2u	3u (168)	5u
	$3u = 168$	
	$1u = 168 \div 3$	
	$= 56$	
	$5u = 5 \times 56$	
	$= 280$	

Ans : 280 students

Topic: Percentage

Concept: Before-Change-After

- 11 After an increase of \$80, Daniel's monthly allowance became \$400. What is the percentage increase in his allowance?

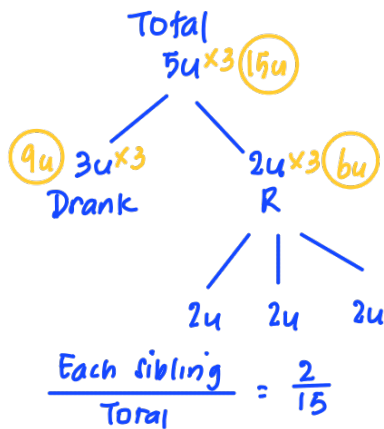
Before	$400 - 80 = 320$	Percentage increase
Change	+ 80	$= \frac{\text{increase}}{\text{original}} \times 100\%$
After	400	$= \frac{80}{320} \times 100\%$
		$= 25\%$

Ans: 25 %

Please do not write in the margin.

Topic: Fractions

- 12 Jenny made some milkshake. She drank $\frac{3}{5}$ of it and her three siblings shared the remainder equally. What fraction of the original amount of milkshake did each of her siblings get?



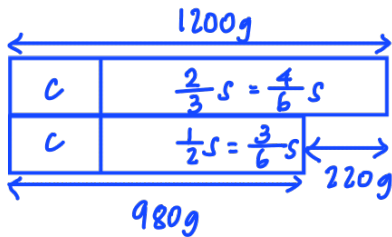
Or

$$\begin{aligned} \text{Remainder} &= 1 - \frac{3}{5} \\ &= \frac{2}{5} \\ \text{Each sibling} &= \frac{2}{5} \div 3 \\ &= \frac{2}{5} \times \frac{1}{3} \\ &= \frac{2}{15} \end{aligned}$$

Ans: $\frac{2}{15}$

Topic: Fractions

- 13 The mass of a container that was $\frac{2}{3}$ - filled with sand was 1200 g. When 220 g of sand was poured out of the container, it became $\frac{1}{2}$ - filled. Find the mass of the empty container.



$$\begin{aligned} 1200 - 220 &= 980 \\ \frac{1}{6}s &= 220 \\ \frac{3}{6}s &= 3 \times 220 \\ &= 660 \\ C &= 980 - 660 \\ &= 320 \end{aligned}$$

Ans: 320 g

Please do not write in the margin.





Nan Hua Primary School
Primary 6 Mathematics
Term 1 Non-Weighted Assessment 2024
Paper 2

Marks	
Total:	12

Name: _____ ()

Class: Primary 6M ____

Date: _____

Duration: 20 min

Parent's Signature

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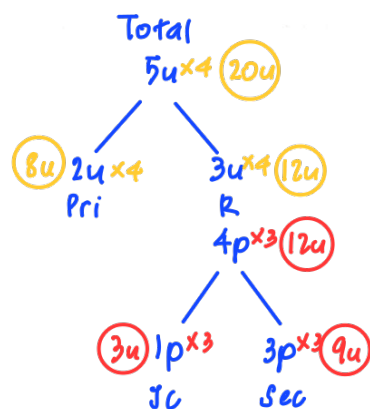
This booklet consists of 4 printed pages.

For questions 1 to 3, show your working clearly and write your answers in the spaces provided. The number of marks available is shown in brackets [] at the end of each question or part-question. (12 marks)

Topic: Fractions

Concept: Remainder Concept

- 1 There were 520 principals at a conference. $\frac{2}{5}$ of them were primary school principals. $\frac{1}{4}$ of the remainder were junior college principals. The rest were secondary school principals. Find the number of secondary school principals at the conference.



$$\begin{aligned} 20u &= 520 \\ 1u &= 520 \div 20 \\ &= 26 \\ 9u &= 9 \times 26 \\ &= 234 \end{aligned}$$

Please do not write in the margin.

Ans : 234 principals [3]



- 2 At a concert, $\frac{45}{100}$ of the audience were female adults, $\frac{30}{100}$ were male adults and the rest were children. There were 450 children at the concert.

Topic: Percentage

Concept: Repeated Identity

- (a) How many female adults were there at the concert?

A(F)	Total	A(M)	Total
$9u$	$20u$	$3p \times 2$ $6u$	$10p \times 2$ $20u$

Summary

A(F)	A(M)	C	Total
$9u$	$6u$	$5u$ (450)	$20u$

$$5u = 450$$

$$1u = 450 \div 5$$

$$= 90$$

$$9u = 9 \times 90$$

$$= 810$$

Ans: (a) 810 female adults [2]

Topic: Percentage

Concept: Before-Change-After

- (b) 150 female adults left the concert before it ended. What percentage of the audience was made up of female adults at the end of the concert?

	A(F)	A(M)	C	Total
Before	810	540	450	1800
Change	-150			-150
After	660			1650

$$6u = 6 \times 90$$

$$= 540$$

$$20u = 20 \times 90$$

$$= 1800$$

$$\frac{\text{FAJ, after}}{\text{Total, after}} \times 100\%$$

$$= \frac{660}{1650} \times 100\%$$

$$= 40\%$$

Ans: (b) 40% [2]

Please do not write in the margin



- 3 Mr Chan bought a laptop and a printer from a shop. He paid a total of \$1824 for these two items after discount. The total discount given for the laptop and printer was \$246. Find the percentage discount given for the printer.



Laptop

Usual Price: \$1290
Discount Given: 10%



Printer

Usual Price: \$?
Discount Given: ? %

	Laptop	Printer	Total
Before	1290	780	
Change	-129	-117	-246
After	1161	663	1824

$$\begin{aligned} \text{Discount of laptop} &= 10\% \times 1290 \\ &= 129 \end{aligned}$$

$$\begin{aligned} \text{Price of laptop after discount} &= 1290 - 129 \\ &= 1161 \end{aligned}$$

$$\begin{aligned} \text{Price of printer after discount} &= 1824 - 1161 \\ &= 663 \end{aligned}$$

$$\begin{aligned} \text{Discount of printer} &= 246 - 129 \\ &= 117 \end{aligned}$$

$$\begin{aligned} \text{Original price of printer} &= 663 + 117 \\ &= 780 \end{aligned}$$

$$\begin{aligned} \text{Percentage discount of printer} &= \frac{117}{780} \times 100\% \\ &= 15\% \end{aligned}$$

Ans: 15% [5]

Please do not write in the margin



2024

P6 WA1 MATH

PEI HWA PRESBYTERIAN PRIMARY SCHOOL

DETAILED SOLUTIONS

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For Thinker parents, the respective levels' blank question papers and detailed solutions have been uploaded to Teams.

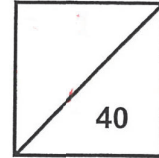
For others, please Whatsapp us at 9831 9770 to obtain the question papers for your child to practise.



DETAILED SOLUTIONS



Pei Hwa Presbyterian Primary School
Mathematics
Primary 6
Weighted Assessment 1



Name: _____ ()

Class: 6R _____ /6M _____

Date: _____

Parent's Signature: _____

Questions 1 to 5 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. **Calculator is allowed.** (10 marks)

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Topic: Fractions

1. (a) Find the value of $5\frac{2}{3} + 3\frac{5}{7}$

$$\begin{aligned} & 5\frac{2 \times 7}{3 \times 7} + 3\frac{5 \times 3}{7 \times 3} \\ & = 5\frac{14}{21} + 3\frac{15}{21} \\ & = 8\frac{29}{21} \\ & = 9\frac{8}{21} \end{aligned}$$

Ans (a): 9 $\frac{8}{21}$

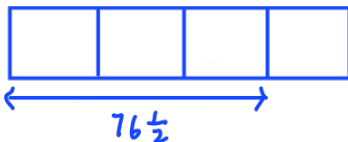
(b) Write down one fraction between $\frac{1}{3}$ and $\frac{2}{3}$

$\frac{1}{3}$	possible answers	$\frac{2}{3}$
$\frac{2}{6}$	$\frac{3}{6} = \frac{1}{2}$	$\frac{4}{6}$
$\frac{3}{9}$	$\frac{4}{9}, \frac{5}{9}$	$\frac{6}{9}$
$\frac{4}{12}$	$\frac{5}{12}, \frac{6}{12} = \frac{1}{2}, \frac{7}{12}$	$\frac{8}{12}$
$\frac{5}{15}$	$\frac{6}{15}, \frac{7}{15}, \frac{8}{15}, \frac{9}{15} = \frac{3}{5}, \frac{10}{15}$	$\frac{10}{15}$

multiple possible answers
Ans (b): $\frac{1}{2}, \frac{4}{9}, \frac{5}{9}, \frac{5}{12}, \frac{7}{12}, \frac{6}{15}, \frac{7}{15}, \frac{8}{15}$ or $\frac{3}{5}$

Topic: Fractions

2. $\frac{3}{4}$ of a number is $76\frac{1}{2}$. Find the number.



part	$3u$ ($76\frac{1}{2}$)
Total	$4u$

$$\begin{aligned} 3u &= 76\frac{1}{2} \\ 1u &= 76\frac{1}{2} \div 3 \\ &= 25.5 \\ 4u &= 4 \times 25.5 \\ &= 102 \end{aligned}$$

Ans: 102

Topic: Ratio

- 3 (a) The table shows the number of students in class 5A, 5B and 5C.
The number of students in 5D is not shown.

Do not write
in this space

Class	Number of Students
5A	38
5B	40
5C	36
5D	?

Find the ratio of the number of students in 5A to 5B to 5C.

Give your answer in the simplest form.

$$\begin{array}{r}
 \underline{5A \quad 5B \quad 5C} \\
 38 \quad 40 \quad 36 \\
 19 \quad 20 \quad 18 \quad \downarrow \div 2
 \end{array}$$

$$5A : 5B : 5C$$

Ans (a): 19 : 20 : 18

- (b) The ratio of the number of students in 5C to 5D is 6 : 7.

Find the number of students in 5D.

$$\begin{array}{r}
 \underline{5A \quad 5B \quad 5C \quad 5D} \\
 38 \quad 40 \quad 36 \\
 19u \quad 20u \quad 18u \\
 \quad \quad \quad 6p \times 3 \quad 7p \times 3 \\
 \hline
 19u \quad 20u \quad 18u \quad 21u \\
 \quad \quad \quad (36)
 \end{array}$$

$$\begin{aligned}
 18u &= 36 \\
 1u &= 36 \div 18 \\
 &= 2 \\
 21u &= 21 \times 2 \\
 &= 42
 \end{aligned}$$

Ans (b): 42 students

Topic: Algebra

4. (a) Simplify $10w + 7 - 3w - 5$

$$10w + 7 - 3w - 5$$

$$= 7w + 2$$

Ans (a): 7w + 2

- (b) Find the value of $\frac{12q+6}{4}$ when $q = 8$.

$$\frac{12q+6}{4} = \frac{(12 \times 8) + 6}{4}$$

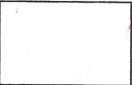
$$= \frac{96+6}{4}$$

$$= \frac{102}{4}$$

$$= 25.5 \text{ or } 25\frac{1}{2}$$

Ans (b): 25.5 or 25½

Do not write
in this space



Topic: Ratio

Concept: Grouping & Sets

5. A pattern is formed using the letters H, P and S. The first 15 letters are as shown.

P H P P S | P H P P S | P H P P S | ...

1st 15th

- (a) Find the ratio of the number of 'P's to the number of 'H's in the 1st 15 letters.

P	H	S
9	3	3
3	1	1

Ans (a): P : H
3 : 1

- (b) How many 'P's are there in the 1st 100 letters?

$$\text{No. of letters in 1 group} = 5$$

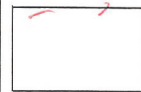
$$\text{No. of groups of 5 in the first 100 letters} = 100 \div 5$$

$$= 20$$

$$\text{No. of 'P's in the 1st 100 letters} = 20 \times 3$$

$$= 60$$

Ans (b): 60



For questions 6 to 13, show your working clearly and write your answers in the spaces provided. The number of marks available is shown in brackets [] at the end of each question or part-question. [30 marks]

Do not write in this space

Topic: Fractions & Ratio

6. In a concert hall, $\frac{3}{5}$ of the people were adults and the rest were children.

(a) Express the number of children in the concert hall as a fraction of the number of adults in the concert hall.

A	C	Total
3u	2u	5u

$$\frac{C}{A} = \frac{2}{3}$$

Ans (a): $\frac{2}{3}$ [1]

Concept: Repeated Identity

(b) The ratio of the number of boys to the number of girls in the concert hall was 8 : 3. There were 250 more boys than girls in the concert hall. How many children were there in the concert hall altogether?

A	C	Total	B	G	C
3u ^{x11}	2u ^{x11}	5u ^{x11}	8p ^{x2}	3p ^{x2}	11p ^{x2}
33u	22u	55u	16u	6u	22u

$$\text{Diff} = 16u - 6u = 10u$$

$$\begin{aligned} 10u &= 250 \\ u &= 250 \div 10 \\ &= 25 \\ 22u &= 22 \times 25 \\ &= 550 \end{aligned}$$

Ans (b): 550 children [2]

Topic: Fractions

7. Marcus spent $\frac{5}{8}$ of his money to buy some identical files. He spent the rest of his money to buy another 4 such files and 6 identical erasers. An eraser cost $\frac{1}{3}$ as much as a file. How many files did Marcus buy altogether?

OR

Total $8u \times 6$ (48p)

$5u \times 6$ (30p) ? files

$3u \times 6$ (18p) 6E

$4F + 6E$

$4F = 4 \times 3p = 12p$

$6E = 6 \times 1p = 6p$

$4F + 6E = 12p + 6p = 18p$

$3p = 1F$

$30p = 10F$

Total no. of files = $10 + 4 = 14$

$\frac{3}{8}T = 4F + 6E = 18p$

$\frac{1}{8}T = 18p \div 3 = 6p$

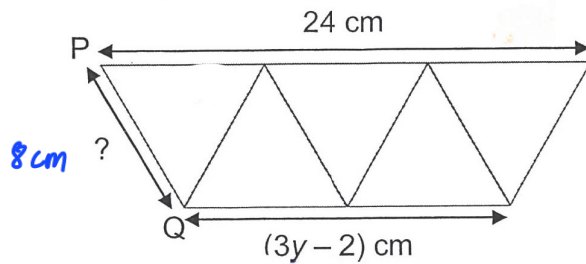
$\frac{5}{8}T = 5 \times 6p = 30p$

Ans: 14 files [3]

Topic: Algebra

8. The figure shows 5 identical equilateral triangles.

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(a) Find the length of PQ.

$$24 \div 3 = 8$$

Ans (a): 8 cm [1]

(b) Find the value of y.

$$\begin{array}{l|l} 2 \times 8 = 16 & y = 18 \div 3 \\ 3y - 2 = 18 & = 6 \\ \hline 3y = 16 + 2 & \\ & = 18 \end{array}$$

Ans (b): y = 6 [2]

Topic: Algebra

9. Caleb baked p cupcakes and Jessie baked $(p + 1)$ cupcakes. Caleb packed the cupcakes he baked into boxes of 4 and had 2 cupcakes left.

(a) Each statement is either true, false or not possible to tell from the information given. Put a tick (✓) to indicate your answer. [2]

Statement	True	False	Not possible to tell
Caleb and Jessie baked $(2p + 1)$ cupcakes altogether.	✓		
Caleb had $\left(\frac{p}{4} - 2\right)$ boxes of cupcakes.		✓	
The number of cupcakes Jessie baked was an even number.		✓	

In order for the number of boxes Caleb has to be a whole number, the number of cupcakes he baked must be an even number. Since Jessie has 1 more than Caleb's, the number of cupcakes Jessie has must be an odd number.

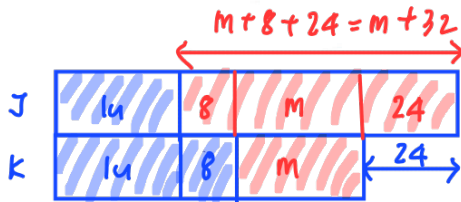
(b) Caleb baked more than 10 cupcakes. What was the least possible number of cupcakes baked by Jessie?

	C		J	
No. of boxes	$\frac{p-2}{4}$	$\frac{9}{4}$	$\frac{10}{4}$	$\frac{12}{4} = 3$
No. of cupcakes in each box	4	4	4	4
Total	$p-2$	9	10	12
Left	2	2	2	2
Total	p	11	12	14

Ans (b): 15 [1]

10 Joshua and Kaelyn have some red beads and blue beads. Kaelyn has 24 fewer beads than Joshua in total. Kaelyn has 8 more blue beads than Joshua.

- (a) Kaelyn has m red beads. Find the number of red beads Joshua has in terms of m .



Ans (a): $(m+32)$ red beads [2]

- (b) The ratio of the number of red beads Joshua has to the number of red beads Kaelyn has is 7 : 5. How many red beads does Kaelyn have?

No. of red beads

J	K	Diff
$7p$	$5p$	$2p$
		$2p = 24 + 8$
		$= 32$
		$1p = 32 \div 2$
		$= 16$
		$5p = 5 \times 16$
		$= 80$

Ans: (b) 80 red beads [2]

11. Wendy had $\frac{5}{7}$ as much money as Zane at first. After Zane gave Wendy \$75, they both had the same amount of money.

(a) How much money did Wendy have in the end?

	W	Z	Total
Before	5u	7u	12u
Change	+75	-75	
After	6u	6u	12u

$$1u = 75$$

$$\begin{aligned} W, \text{ end} &= 6u \\ &= 6 \times 75 \\ &= 450 \end{aligned}$$

Ans (a): \$450 [2]

Concept: Unchanged Item

(b) Zane then donated some money to a charity. The ratio of the amount of money Wendy had to the amount of money Zane had now became 3 : 1. How much money did Zane donate to the charity?

	W	Z	Total
Before	450	450	
Change		- ?	
After	3p (450)	1p	

Unchanged Item

$$3p = 450$$

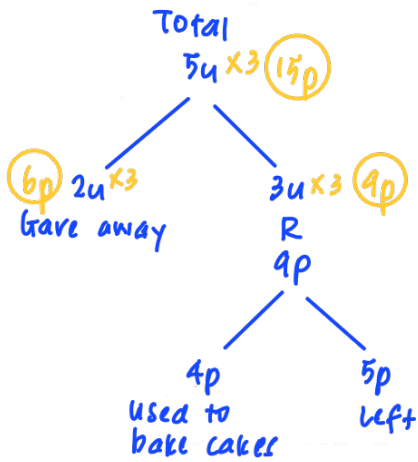
$$\begin{aligned} 1p &= 450 \div 3 \\ &= 150 \end{aligned}$$

$$\begin{aligned} \text{Amount donated} &= 450 - 150 \\ &= 300 \end{aligned}$$

Ans (b): \$300 [2]

12. Mabel had 12 kg of sugar. She gave away $\frac{2}{5}$ of it and used $\frac{4}{9}$ of the rest of the sugar to bake some cakes.

(a) Find the amount of sugar Mabel used to bake the cakes.



$$\begin{aligned}
 15p &= 12 \\
 1p &= 12 \div 15 \\
 &= 0.8 \\
 4p &= 4 \times 0.8 \\
 &= 3.2
 \end{aligned}$$

Ans (a): 3.2 kg [2]

(b) Mabel then packed the remaining amount of sugar into some bags, each containing $\frac{7}{8}$ kg of sugar.

- (i) How many bags of sugar could she have at most?
- (ii) What was the mass of sugar left unpacked? Give your answer as a fraction in its simplest form.

(a)

$$\begin{aligned}
 \text{Left} &= 5p \\
 &= 5 \times 0.8 \\
 &= 4 \\
 \text{No. of bags} &= 4 \div \frac{7}{8} \\
 &= 4 \times \frac{8}{7} \\
 &= 4\frac{4}{7}
 \end{aligned}$$

(b) Mass of sugar packed

$$\begin{aligned}
 &= 4 \times \frac{7}{8} \\
 &= 3\frac{1}{2} \\
 \text{Mass of sugar left unpacked} &= 4 - 3\frac{1}{2} \\
 &= \frac{1}{2} \\
 \text{or} \\
 \text{Mass of sugar left unpacked} &= \frac{4}{7} \times \frac{7}{8} \\
 &= \frac{4}{8} \\
 &= \frac{1}{2}
 \end{aligned}$$

Ans (b)(i): 4 bags

(b)(ii): $\frac{1}{2}$ kg [3]

13. At a soccer match, tickets were sold in Category A, B and C.

- (a) The number of Category A tickets sold was $\frac{1}{3}$ of the total number of Category B and Category C tickets sold. The number of Category B tickets sold was $\frac{2}{3}$ of the total number of Category A and Category C tickets sold. What fraction of the total tickets sold were Category A tickets? Leave your answer in the simplest form.

A	B+C	Total	B	A+C	Total
$1u \times 5$	$3u \times 5$	$4u \times 5$	$2p \times 4$	$3p \times 4$	$5p \times 4$
$5u$	$15u$	$20u$	$8u$	$12u$	$20u$

Summary

A	B	C	Total
$5u$	$8u$	$7u$	$20u$

$C = 15u - 8u = 7u$

$\frac{A}{Total} = \frac{5}{20} = \frac{1}{4}$

Ans (a): $\frac{1}{4}$ [2]

Concept: NET Table

- (b) The table shows the prices of tickets for each category.

Category	Price per ticket
A	\$28
B	\$18
C	\$12

The total amount collected from the ticket sale was \$14 720.

How many Category C tickets were sold?

	A	B	C	Total
N No of tickets	$5u$	$8u$	$7u$	$20u$
E Cost of each ticket (\$) 28 18 12				
T Total cost (\$) 140u 144u 84u 368u				(14720)

$368u = 14720$

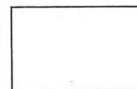
$1u = 14720 \div 368$

$= 40$

$7u = 7 \times 40$

$= 280$

Ans (b): 280 tickets [3]





2024 P6 WA1 MATH RAFFLES GIRLS' PRIMARY SCHOOL

DETAILED SOLUTIONS

Detailed solutions are crafted following the methods taught at Thinker Education and are offered as a guiding reference. Any logically sound mathematical answers are accepted.

For Thinker parents, the respective levels' blank question papers and detailed solutions have been uploaded to Teams.

For others, please Whatsapp us at 9831 9770 to obtain the question papers for your child to practise.





**RAFFLES GIRLS' PRIMARY SCHOOL
WEIGHTED ASSESSMENT 1 2024
MATHEMATICS
PRIMARY 6**

Name: _____ ()

Form Class: P6 _____

Math Teacher: _____

Date: 27 February 2024

Duration: 50 minutes

Total Score (Out of 30 marks)	
Parent's Signature	

INSTRUCTIONS TO CANDIDATES

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer **ALL** questions and show all working clearly.
4. The use of calculator is allowed for this paper.

Questions 1 to 5 carry 1 mark each and Questions 6 to 11 carry 2 marks each.
Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. [17 marks]

Topic: Whole Numbers

1. Write one million, forty thousand and twelve in numerals.

1000000 40000 12

$$\begin{array}{r} 1000\ 000 \\ 40\ 000 \\ 12 \\ \hline 1040\ 012 \\ \hline \end{array}$$

Ans: 1040 012 [1]

Topic: Whole Numbers

2. Use all the digits 7, 0, 8 and 5 to form the largest 4-digit odd number.

Handwritten notes:
The largest
number

Ans: 8705 [1]

Topic: Fractions

3. How many sixths are there in $3\frac{5}{6}$?

$$= \frac{23}{6}$$

Ans: 23 [1]

Topic: Fractions

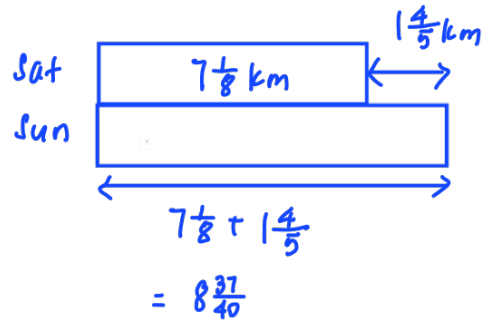
4. Rui Qi prepared 9 litres of fruit juice for a party. She poured the fruit juice equally into 24 cups. How many litres of fruit juice were there in each cup? Give your answer as a fraction in the simplest form.

$$\begin{aligned} \text{Volume of juice in each cup} &= 9 \div 24 \\ &= \frac{9}{24} \\ &= \frac{3}{8} \end{aligned}$$

Ans: $\frac{3}{8}$ l [1]

Topic: Fractions

5. On Saturday, Jun Jie jogged for a distance of $7\frac{1}{8}$ km. He jogged $1\frac{4}{5}$ km shorter on Saturday than on Sunday. How far did he jog on Sunday? Give your answer as a mixed number.



Ans: $8\frac{37}{40}$ km [1]

Topic: Fractions

6. Arrange these fractions from the largest to the smallest.

$$\frac{10}{9}, \quad 1\frac{1}{11}, \quad \frac{7}{6}$$

$$|\frac{1}{9} \quad |\frac{1}{11} \quad |\frac{1}{6}$$

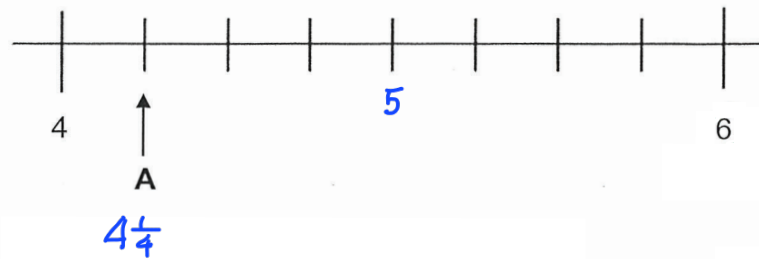
Smallest greatest

Since the numerators are the same, the greater the denominator, the smaller the fraction

Ans: $\frac{7}{6}$ $\frac{10}{9}$ $1\frac{1}{11}$ [2]
Largest Smallest

Topic: Fractions

7. In the number line, what is the mixed number represented by A?
Give your answer in the simplest form.



Ans: $4\frac{1}{4}$ [2]

Topic: Fractions

Concept: NET Table

8. Arjun paid \$432 for a dining table and 4 identical chairs. The price of each chair was $\frac{1}{5}$ of the price of the dining table. How much did Arjun pay for the dining table?

	DT	C	Total
No. of items	1	4	5
Each (\$)	5u	1u	
Total (\$)	5u	4u	9u (432)

$$9u = 432$$

$$1u = 432 \div 9$$

$$= 48$$

$$5u = 5 \times 48$$

$$= 240$$

Ans: \$ 240 [2]

Topic: Whole Numbers

Concept: Grouping & Sets

9. A departmental store gives a discount of \$4 for every \$25 spent. The jacket costs \$189 before discount. What is the price of the jacket after discount?



$$\begin{aligned} \text{No. of groups of } \$25 &= 189 \div 25 \\ &= 7R14 \\ \text{Discount} &= 7 \times 4 \\ &= 28 \\ \text{Price of jacket after discount} &= 189 - 28 \\ &= 161 \end{aligned}$$

Ans: \$ 161 [2]

Topic: Whole Numbers

Concept: Grouping & Sets

10. The first 15 numbers of a number pattern are given below.

5, 2, 7, 0, 1 | 5, 2, 7, 0, 1 | 5, 2, 7, 0, 1 | ...
1st 15th

What is the sum of the first 124 numbers?

$$\begin{aligned} \text{Sum of 1 group of 5 numbers} &= 5 + 2 + 7 + 0 + 1 \\ &= 15 \end{aligned}$$

$$\begin{aligned} \text{No. of groups of 5 numbers} &= 124 \div 5 \\ &= 24R4 \end{aligned}$$

$$\begin{aligned} \hookrightarrow \text{Sum of next 4 numbers} \\ &= 5 + 2 + 7 + 0 \\ &= 14 \end{aligned}$$

$$\begin{aligned} \text{Sum of first 124 numbers} &= (24 \times 15) + 14 \\ &= 374 \end{aligned}$$

Ans: 374 [2]

Topic: Fractions

Concept: Before-Change-After

11. Shelly had some chocolate and vanilla cupcakes. She sold $\frac{2}{7}$ of the chocolate cupcakes and $\frac{3}{8}$ of the vanilla cupcakes. $\frac{4}{7}$ of the cupcakes sold were chocolate cupcakes. What fraction of the cupcakes did she sell altogether?

	C	V	C	V	Total
Before	$7u^{x2}$	$8p$	$14p$	$8p$	$22p$
Change	$-2u^{x2}$	$-3p$	$-4p$	$-3p$	$-7p$
After	$5u^{x2}$	$5p$	$10p$	$5p$	$15p$

$$\frac{\text{Sold}}{\text{Before}} = \frac{7}{22}$$

Ans: $\frac{7}{22}$ [2]

For questions 12 to 14, show your working clearly and write your answers in the spaces provided. The number of marks available is shown in the brackets [] at the end of each question or part-question. [13 marks]

Topic: Fractions

Concept: Before-Change-After

12. Aminah, Belinda and Devi had a total of 1209 beads at first. They used the same number of beads to make necklaces. Aminah used $\frac{3}{5}$ of her beads, Belinda used $\frac{2}{3}$ of her beads and Devi used $\frac{1}{2}$ of her beads. How many beads did they use altogether to make the necklaces?

	A	B	D	A	B	D	Total
Before	$5u^{x2}$	$3p^{x3}$	$2y^{x6}$	$10u$	$9u$	$12u$	$31u (1209)$
Change	$-3u^{x2}$	$-2p^{x3}$	$-1y^{x6}$	$-6u$	$-6u$	$-6u$	$-18u$
After	$2u^{x2}$	$1p^{x3}$	$1y^{x6}$	$4u$	$3u$	$6u$	$13u$

$$31u = 1209$$

$$1u = 1209 \div 31$$

$$= 39$$

$$18u = 18 \times 39$$

$$= 702$$

Ans: 702 beads [3]

Topic: Whole Numbers

13. 6 identical grey equilateral triangles are used to form Figure 1. Dots are placed at an equal distance from each other along the sides of each triangle. The number of dots on each side of a grey triangle is the same and each corner has a dot on it.

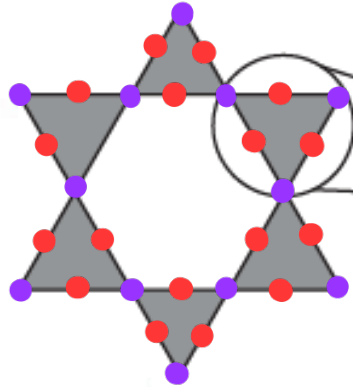


Figure 1



Figure 2

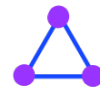
- (a) Figure 2 shows a section of Figure 1. Three dots are placed on each side of a grey triangle. How many dots will there be altogether in Figure 1?

$$\begin{aligned}
 \text{No. of dots in } 1 \Delta &= 6 \\
 \text{No. of } \Delta\text{s} &= 6 \\
 \text{Total no. of dots less the overlapping dots} \\
 &= (6 \times 6) - 6 \\
 &= 30
 \end{aligned}$$

Ans: (a) _____ [2]

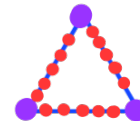
- (b) When there are 102 dots in Figure 1, how many dots are there on each side of a grey triangle?

$$\begin{aligned}
 \text{No. of dots less the corner dots} &= 102 - 6 - 6 \\
 &= 90
 \end{aligned}$$



$$\begin{aligned}
 \text{No. of dots per triangle excluding corner dots} \\
 &= 90 \div 6 \\
 &= 15
 \end{aligned}$$

$$\begin{aligned}
 \text{No. of dots per side excluding corner dots} \\
 &= 15 \div 3 \\
 &= 5
 \end{aligned}$$



$$\begin{aligned}
 \text{No. of dots per side including corner dots} \\
 &= 5 + 2 \\
 &= 7
 \end{aligned}$$

Ans: (b) 7 dots [3]

Topic: Fractions

14. The table shows the prices of tickets for an exhibition.

Type	Price per ticket
Adult	\$30
Senior Citizen	\$18
Student	\$12

The number of student tickets sold was $\frac{5}{11}$ of the number of adult tickets sold. $\frac{1}{9}$ of the tickets sold were senior citizen tickets. A total of \$9372 was collected from the sale of tickets.

(a) What fraction of the tickets sold were student tickets?

S	A	S+A	SC	S+A	Total
5u	11u	16u	1p × 2	8p × 2	9p × 2
5u	11u	16u	2u	16u	18u

Summary			
S	A	SC	Total
5u	11u	2u	18u

$\frac{\text{Student}}{\text{Total}} = \frac{5}{18}$

Ans: (a) $\frac{5}{18}$ [2]

(b) What was the total number of tickets sold?

	S	A	SC	Total
No. of tickets	5u	11u	2u	18u
Price per ticket (\$) 12		30	18	
Total cost (\$) 60u		330u	36u	426u (9372)

$$\begin{aligned}
 426u &= 9372 \\
 1u &= 9372 \div 426 \\
 &= 22 \\
 18u &= 18 \times 22 \\
 &= 396
 \end{aligned}$$

Ans: (b) 396 tickets [3]

END OF PAPER

2024

P6 WA1 MATH

BUKIT TIMAH

PRIMARY SCHOOL

DETAILED SOLUTIONS

Detailed solutions are crafted following the methods taught at Thinker Education and are offered as a guiding reference. Any logically sound mathematical answers are accepted.

To obtain the blank question paper for your child to attempt, please Whatsapp us at 9831 9770.



BUKIT TIMAH PRIMARY SCHOOL
WEIGHTED ASSESSMENT 1
2024
PRIMARY 6

STANDARD MATHEMATICS
PAPER 1: BOOKLET A

Name : _____ ()

Class : Pri. 6 _____

Date : 23 FEBRUARY 2024

Parent's Signature : _____

Total Time for **Booklets A and B**: 1 hour

INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the blanks provided.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answers on the Optical Answer Sheet (OAS) provided.
6. You are **not** allowed to use a calculator.

		Max Mark	Marks Obtained
Paper 1	Booklet A	20	
	Booklet B	25	
Total		45	

This question paper consists of 6 printed pages.

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each.
For each question, four options are given. One of them is the correct answer.
Make your choice (1, 2, 3 or 4).

Shade the correct oval on the Optical Answer Sheet.

(20 marks)

Topic: Whole Numbers

63000

82

1. Which of the following is sixty-three thousand and eighty-two in numerals?

- (1) 6 382
- (2) 63 082
- (3) 63 820
- (4) 630 082

Topic: Whole Numbers

2. Find the value of $105 - (60 + 25) \div 5 + 8$

$$\begin{aligned} &= 105 - \frac{85}{5} + 8 \\ &= 105 - 17 + 8 \\ &= 88 + 8 \end{aligned}$$

- (1) 12
- (2) 58
- (3) 80
- (4) 96

Topic: Fractions

3. Find the value of $\frac{1}{4} + \frac{2}{3}$

$$\begin{aligned} &= \frac{1 \times 3}{4 \times 3} + \frac{2 \times 4}{3 \times 4} \\ &= \frac{3}{12} + \frac{8}{12} \\ &= \frac{11}{12} \end{aligned}$$

- (1) $\frac{5}{12}$
- (2) $\frac{3}{7}$
- (3) $\frac{11}{24}$
- (4) $\frac{11}{12}$

Topic: Fractions

4. Express $7\frac{3}{50}$ as a decimal.

(1) 7.06

(2) 7.3

(3) 7.35

(4) 7.6

$$7\frac{3}{50} \times \frac{2}{2} = 7\frac{6}{100} \\ = 7.06$$

Topic: Ratio

5. $3 : 5 = 21 : \square$

Find the missing number in the box.

(1) 15

(2) 23

(3) 26

(4) 35

$$\begin{array}{l} 3 : 5 \\ \times 7 \downarrow \quad \downarrow \times 7 \\ 21 : 35 \end{array}$$

Topic: Percentage

6. The usual price of a bag was \$150. During a sale, Mdm Rina bought the bag for \$120. What was the percentage discount for the bag?

(1) 20 %

(2) 25 %

(3) 30 %

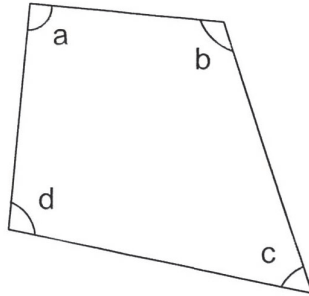
(4) 80 %

Before 150
Change -30
After 120

$$\text{Percentage discount} = \frac{30}{150} \times 100\% \\ = 20\%$$

Topic: Geometry (Angles)

7. Which angle is a right angle?



- (1) $\angle a$
- (2) $\angle b$
- (3) $\angle c$
- (4) $\angle d$

Topic: Measurement (Mass)

8. The mass of a ream of paper is about _____.

- (1) 20 kg
- (2) 2 g
- (3) 200 kg
- (4) 2 000 g

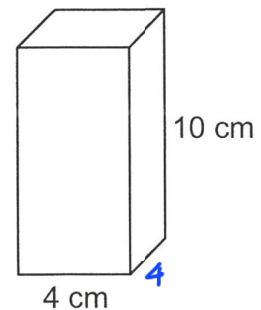


Topic: Measurement (Volume)

9. A solid cuboid of height 10 cm has a square base of side 4 cm.
What is its volume?

- (1) 40 cm^3
- (2) 120 cm^3
- (3) 160 cm^3
- (4) 400 cm^3

$$V = 4 \times 4 \times 10 \\ = 160$$



Topic: Statistics (Average)

10. The table below shows the time taken by four children to fold a paper star.

Name	Time Taken (s)
Cai Ling	12.6
Daphne	10.7
Elson	11.6
Farid	13.1

Find the average time taken by the four children to fold a paper star.

(1) 11 s

(2) 12 s

(3) 46 s

(4) 48 s

$$\begin{aligned} \text{Total} &= 12.6 + 10.7 + 11.6 + 13.1 \\ &= 48 \end{aligned}$$

$$\begin{aligned} \text{Average time taken} &= 48 \div 4 \\ &= 12 \end{aligned}$$

Topic: Rate

Concept: Grouping & Sets

11. The table shows the entrance fees for an animal farm tour.

Quantity	Price
First 10 tickets	\$8 each
Every additional ticket	\$5

A group of people went for the animal farm tour and paid a total of \$160.
How many tickets did the group buy?

(1) 16

(2) 20

(3) 26

(4) 32

$$\begin{aligned} \text{Cost of first 10 tickets} &= 10 \times 8 \\ &= 80 \end{aligned}$$

$$\begin{aligned} \text{Cost of remaining tickets} &= 160 - 80 \\ &= 80 \end{aligned}$$

$$\begin{aligned} \text{No. of additional tickets} &= 80 \div 5 \\ &= 16 \end{aligned}$$

$$\begin{aligned} \text{Total no. of tickets} &= 16 + 10 \\ &= 26 \end{aligned}$$

Topic: Fractions

12. Jane bought 6 slices of pizza with $\frac{1}{4}$ of her money. A slice of pizza costs twice as much as a muffin. How many muffins could Jane buy with her remaining money?

- (1) 9
- (2) 12
- (3) 36
- (4) 48

$$\begin{aligned} \frac{1}{4} T &= 6P \\ &= 6 \times 2u \\ &= 12u \\ \frac{3}{4} T &= 3 \times 12u \\ &= 36u \\ 36u &\rightarrow 36 \text{ muffins} \end{aligned}$$



Topic: Ratio

Concept: Before-Change-After/Equal Scenario

13. Angie and Raj had equal lengths of rope. Angie used 90 cm of rope. Raj used 70 cm of rope. In the end, the ratio of the length of Angie's rope to the length of Raj's rope became 3 : 4. What was the length of Angie's rope at first?

- (1) 20 cm
- (2) 60 cm
- (3) 150 cm
- (4) 160 cm

	A	R	
Before	$3u + 90$	$4u + 70$	$3u + 90 = 4u + 70$
Change	-90	-70	
After	$3u$	$4u$	

$3u$	90
$3u$	$4u \quad \quad 70$

$$\begin{aligned} 1u &= 90 - 70 & 60 + 90 \\ &= 20 & = 150 \\ 3u &= 3 \times 20 \\ &= 60 \end{aligned}$$

Topic: Percentage

14. The table below show the scores of 60 contestants who took part in a game.

Score	0 - 10	11 - 20	21 - 30	31 - 40	41 - 50
Number of contestants	7	8	15	12	8

↓
← 20 →

The top scoring 30% of the contestants could win prizes. What was the minimum score a contestant had to obtain to win a prize?

- (1) 20
- (2) 21
- (3) 30
- (4) 31

$$\begin{aligned} \text{Total no. of contestants} &= 7 + 8 + 15 + 12 + 8 \\ &= 50 \\ 30\% \times 50 &= 15 \end{aligned}$$

15. At a carnival, there was a total of 82 children queuing for popcorn.

There were at least 3 girls standing between any 2 boys.

Find the greatest possible number of boys in the queue.

(1) 17

B G G G | B G G G | B

(2) 21

No. of groups of 4 = $82 \div 4$
= 20R2

(3) 22

(4) 31

Greatest no. of boys = $(20 \times 1) + 1$
= 21

– End of Booklet A –

[Go on to Booklet B]

**BUKIT TIMAH PRIMARY SCHOOL
WEIGHTED ASSESSMENT 1
2024
PRIMARY 6**

**STANDARD MATHEMATICS
PAPER 1: BOOKLET B**

Name : _____ ()

Class : Pri. 6 _____

Date : **23 FEBRUARY 2024**

Total Time for **Booklets A and B**: 1 hour

INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the blanks provided.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answers on the Optical Answer Sheet (OAS) provided.
6. You are **not** allowed to use a calculator.

		Marks Awarded
Paper 1 Booklet B	Short – answer Questions 16 - 30	
Total (25 marks)		

This question paper consists of 8 printed pages.

Questions 16 to 20 carry 1 mark each. Write your answers in the spaces provided.
For questions which require units, give your answers in the units stated.

(5 marks)

Topic: Whole Numbers

16. Use all the digits 0, 4, 5, 9 to form the number that is closest to 5 000.

Ans: 5049

Topic: Fractions

17. Find the value of $\frac{4}{7} \div \frac{10}{11}$

Give your answer as a fraction in the simplest form.

$$\begin{aligned} \frac{4}{7} \div \frac{10}{11} \\ &= \frac{4}{7} \times \frac{11}{10} \\ &= \frac{44 \div 2}{70 \div 2} \\ &= \frac{22}{35} \end{aligned}$$

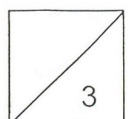
Ans: $\frac{22}{35}$

Topic: Decimals

18. Find the value of 3.5×800

$$\begin{aligned} 3.5 \times 800 \\ &= 3.5 \times 8 \times 100 \\ &= 28 \times 100 \\ &= 2800 \end{aligned}$$

Ans: 2800



Topic: Ratio

19. There are 36 red bells, 16 blue bells and 28 yellow bells in the drawer.

Express the ratio of the number of yellow bells to the number of red and blue bells in the simplest form.

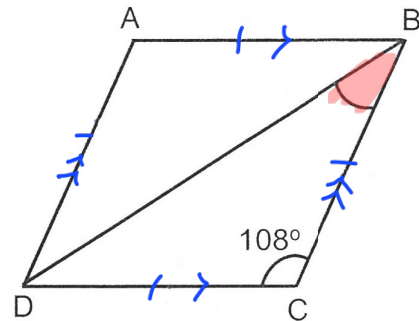
$$\frac{Y}{R+B} = \frac{28}{36+16} = \frac{28}{52} \quad \downarrow \div 4$$
$$= \frac{7}{13}$$

Ans: 7:13

Topic: Geometry (Angles)

20. In the figure, ABCD is a rhombus. Find $\angle DBC$.

$$\angle DBC = (180^\circ - 108^\circ) \div 2$$
$$= 36^\circ$$



Ans: 36°

Topic: Fractions & Ratio

Concept: Before-Change-After

23. Mr Lim had $\frac{4}{5}$ as many chickens as Mr Koh. Mr Koh gave $\frac{1}{2}$ of his chickens to Mr Lim. What is the ratio of the number of chickens Mr Koh had to the number of chickens Mr Lim had in the end?

$\frac{1}{2} \times \frac{5}{5} = \frac{5}{10}$

	L	K	L	K
Before	$4u^{x2}$	$5u^{x2}$	$8u$	$10u$
Change			$+5u$	$-5u$
After			$13u$	$5u$

Ans: $\frac{K : L}{5 : 13}$

Topic: Whole Numbers & Statistics(Average)

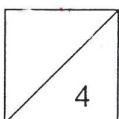
24. The average height of Elyse, Fatimah and Rajoo is 165 cm. Elyse and Fatimah are of the same height. Rajoo is 15 cm shorter than Fatimah. Find Rajoo's height.

Total height = 3×165
 $= 495$

E	$1u$	15	} 495
F	$1u$	15	
R	$1u$		

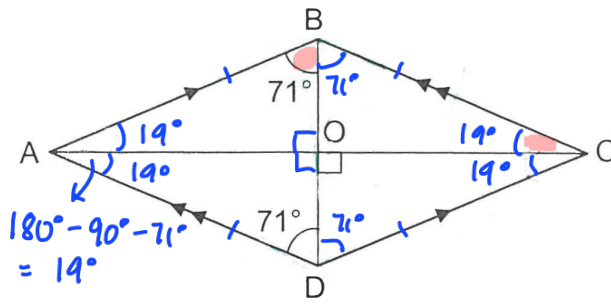
$3u + 15 + 15 = 495$
 $3u + 30 = 495$
 $3u = 495 - 30$
 $= 465$
 $1u = 465 \div 3$
 $= 155$

Ans: 155 cm



Topic: Geometry (Angles)

25. In the quadrilateral ABCD, AOC and BOD are straight lines.



Each of the statements below is either true, false or not possible to tell based on the information given. For each statement, put a tick (✓) to indicate your answer.

Statement	True	False	Not possible to tell
$\angle OCD = \angle BAD$		✓	
$\angle BCO + \angle ABO = 180^\circ$ $19^\circ + 71^\circ = 90^\circ$		✓	
ABCD is a rhombus.	✓		

Since $\angle ADB = \angle ABD = 71^\circ$, $\triangle ABD$ is an isosceles \triangle .

$\angle BCO = \angle DAO = 19^\circ$ ($BC \parallel AD$), $\angle DCO = \angle BAO = 19^\circ$ ($AB \parallel DC$), $\triangle BAC$ and $\triangle DAC$ are isosceles \triangle

Topic: Measurement (Perimeter)

26. Figure EFGH is a square. It is made up of a small square and 4 identical rectangles. The perimeter of Figure EFGH is 44 cm. Find the perimeter of the shaded rectangle.

$$l_u + l_p = 44 \div 4$$

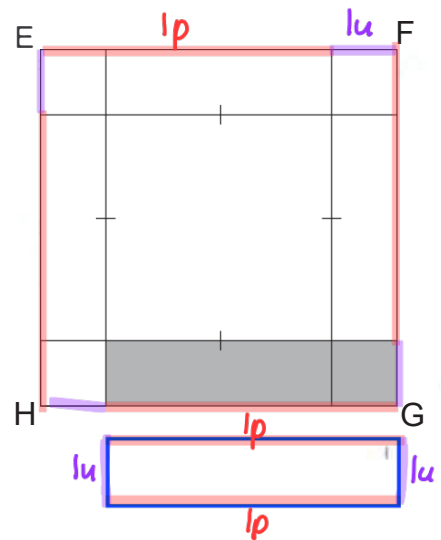
$$= 11$$

Perimeter of shaded rectangle

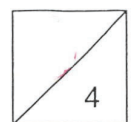
$$= 2u + 2p$$

$$= 2 \times 11$$

$$= 22$$



Ans: 22 cm



27. Study the pattern and find the percentage of shaded parts in Figure 50.



Figure 1

$$\frac{1}{1} = 100\%$$

$$\frac{1}{1 \times 1}$$

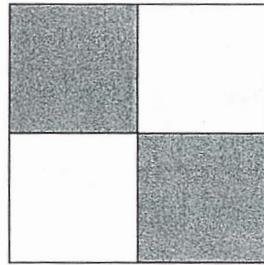


Figure 2

$$\frac{2}{4} \times 100\% = 50\%$$

$$\frac{2}{2 \times 2}$$

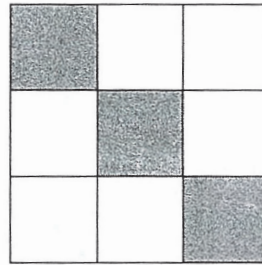


Figure 3

$$\frac{3}{9} \times 100\% = 33\frac{1}{3}\%$$

$$\frac{3}{3 \times 3}$$

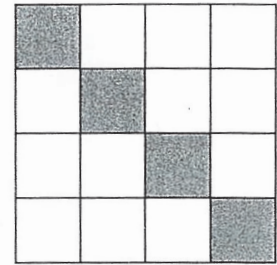


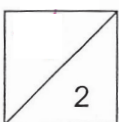
Figure 4

$$\frac{4}{16} \times 100\% = 25\%$$

$$\frac{4}{4 \times 4}$$

$$\begin{aligned} \text{Figure 50} &= \frac{50}{50 \times 50} \times 100\% \\ &= \frac{1}{50} \times 100\% \\ &= 2\% \end{aligned}$$

Ans: 2 %



Topic: Fractions

Concept: Repeated Identity

28. John has two baskets P and Q.

The number of fruits in Basket P is twice the number of fruits in Basket Q.

$\frac{1}{5}$ of the fruits in Basket P are apples and $\frac{1}{3}$ of the fruits in Basket Q are apples.

What fraction of the fruits that John has are apples? Express your answer in the simplest form.

P			Q			Total		
A	Others	Total	A	Others	Total	A	Others	Total
$1u \times 3$	$4u \times 3$	$5u \times 3$	$1p \times 5$	$2p \times 5$	$3p \times 5$			
$3u \times 2$	$12u \times 2$	$15u \times 2$	$5u$	$10u$	$15u$			
$6u$	$24u$	$30u$				$11u$	$34u$	$45u$

$$\frac{A}{\text{Total}} = \frac{11}{45}$$

Ans: $\frac{11}{45}$

Topic: Ratio & Fractions

Concept: Unchanged Item

29. The ratio of the number of children to the number of adults at a party was 9 : 4.

$\frac{3}{9}$ of the children left the party and there were 80 remaining people at the party.

How many adults were at the party?

	C	A	Total
Before	$9u$	$4u$	$13u$
Change	$-3u$		
After	$6u$	$4u$	$10u$ (80)

$$10u = 80$$

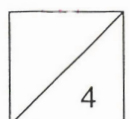
$$1u = 80 \div 10$$

$$= 8$$

$$4u = 4 \times 8$$

$$= 32$$

Ans: 32 adults

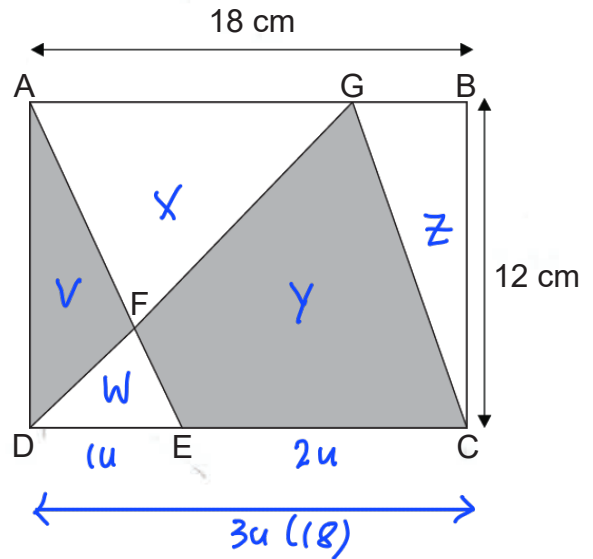


Topic: Measurement (Area)

30. In the figure, ABCD is a rectangle. The length of CE is twice the length of DE.

The area of the shaded parts is 120 cm^2 . Find the area of triangle DEF.

$$\begin{aligned}
 3u &= 18 \\
 1u &= 18 \div 3 \\
 &= 6 \\
 2u &= 2 \times 6 \\
 &= 12 \\
 W + Y &= \frac{1}{2} \times 18 \times 12 \\
 &= 108 \\
 W + V &= \frac{1}{2} \times 6 \times 12 \\
 &= 36 \\
 2W + V + Y &= 108 + 36 \\
 &= 144 \\
 V + Y &= 120 \\
 2W &= 144 - 120 \\
 &= 24 \\
 W &= 24 \div 2 \\
 &= 12
 \end{aligned}$$



Ans: 12 cm^2

– End of Paper 1 –

