NANYANG PRIMARY SCHOOL

# END-OF-YEAR EXAMINATION 2024

## PRIMARY 3

## MATHEMATICS

Duration: 1 hour 30 minutes

**INSTRUCTIONS TO STUDENTS**

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Write your answers in this booklet.

Name: _____ (  )

Class: Primary 3 (  )

Parent's Signature: _____

| | |
|---|---|
| **MCQ** | **/ 5** |
| **SAQ** | **/ 28** |
| **LAQ** | **/ 17** |
| **Total** | **/ 50** |

Please sign and return the examination paper the next day. Any queries should be raised at the same time when returning paper.

**Multiple Choice Questions (MCQ)**

Questions 1 to 5 carry 1 mark each. 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 (1, 2, 3 or 4) in the bracket ( ) provided.

(5 marks)

---

1. What is three thousand, six hundred and six written as a numeral?

   (1) 3066

   (2) 3366

   (3) 3606

   (4) 3660

   ( )

2. What is the missing number in the equation below?

   7023 = 7000 + [ ? ] + 3

   (1) 203

   (2) 200

   (3) 23

   (4) 20

   ( )

3. Arrange the fractions in order from the greatest to the smallest.

$\frac{1}{2}$ , $\frac{2}{8}$ , $\frac{5}{7}$

| | Greatest | | | | Smallest |
|---|---|---|---|---|---|
| (1) | $\frac{5}{7}$ | , | $\frac{1}{2}$ | , | $\frac{2}{8}$ |
| (2) | $\frac{5}{7}$ | , | $\frac{2}{8}$ | , | $\frac{1}{2}$ |
| (3) | $\frac{2}{8}$ | , | $\frac{1}{2}$ | , | $\frac{5}{7}$ |
| (4) | $\frac{2}{8}$ | , | $\frac{5}{7}$ | , | $\frac{1}{2}$ |

(  )

4. Express 2080 g in kilograms and grams.

(1) 2 kg 8 g

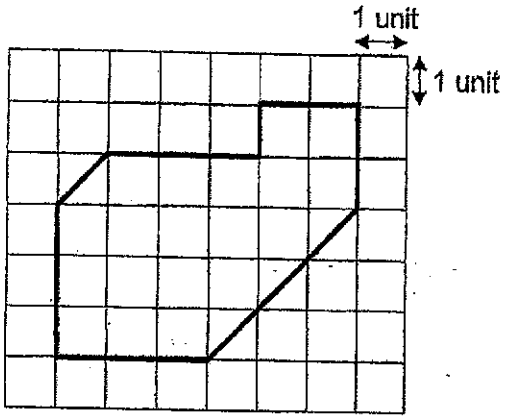
(2) 2 kg 80 g

(3) 20 kg 8 g

(4) 20 kg 80 g

(  )

5. Each ☐ has an area of 1 square unit.




What is the area of the figure above?

(1) 23 square units

(2) 21 square units

(3) 19 square units

(4) 18 square units

( )

**Short-Answer Questions (SAQ)**

Questions 6 to 13 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(8 marks)

6. What is the missing denominator?

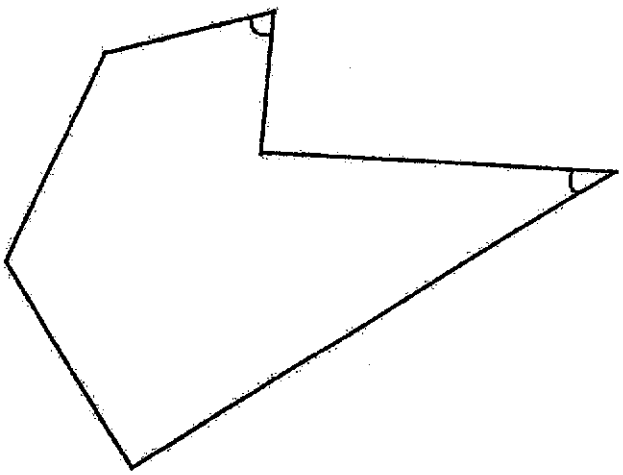
$$\frac{3}{5} = \frac{9}{\boxed{?}}$$

Ans: _____

7. Express $\frac{14}{35}$ in its simplest form.

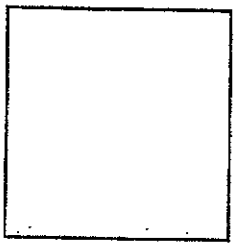
Ans: _____

8. How many acute angles are there in the figure below?



Ans: _____

9. Find the perimeter of the square.




Ans: _____ cm

10. The length of a rectangular grass patch is 8 m.
Its breadth is 7 m.
What is the area of the grass patch?

Ans: _____ $m^2$

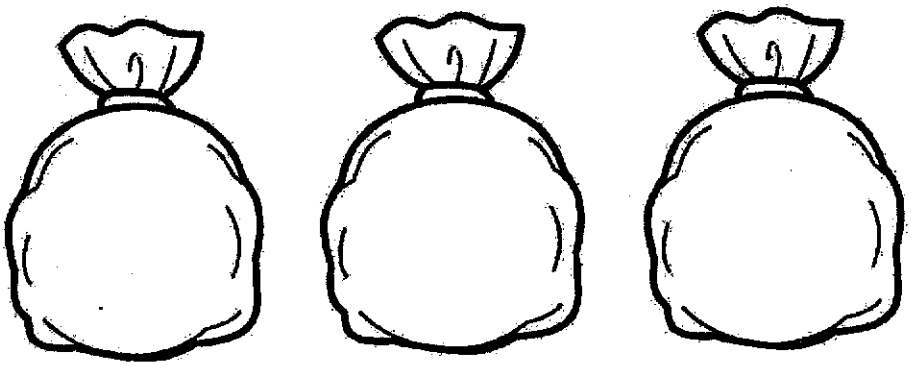
11. Write the time 00 10 in 12-hour clock.

Ans: _____

12. Axel started to cycle at 11 30.
He finished cycling at 13 17.
How long did he cycle?

Ans: _____ h _____ min

13. There are 3 bags, A, B and C.
All the pens in each bag are put into groups of 6.



Bag A Bag B Bag C

Bag A has 36 pens.
It contains the least number of pens.
The number of pens in Bag B is between 45 and 50.
Bag C has fewer pens than Bag B.
How many pens are there in Bag C?

Ans: _____

**Short-Answer Questions (SAQ)**

Questions 14 to 23 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.

(20 marks)

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14. Look at the number patterns below.
Find the missing number in each number pattern.

(a) 3699 , 3709 , 3809 , 3819 , 3919 , 3929 , ? , 4039 , 4139

Ans: (a) _____

(b) ? , 7489 , 7539 , 7589 , 7639 , 7689

Ans: (b) _____

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15. (a) Find the sum of 560 and 1320.

Ans: (a) _____

(b) 8001 − ? = 2417

Ans: (b) _____

---

16. (a) Michelle bought 5 trays of eggs.
Each tray had 8 eggs.
How many eggs did Michelle buy altogether?

Ans: (a) _____

(b) Michelle used 4 eggs to bake each cake.
How many cakes could she bake with all the eggs that she bought?

Ans: (b) _____

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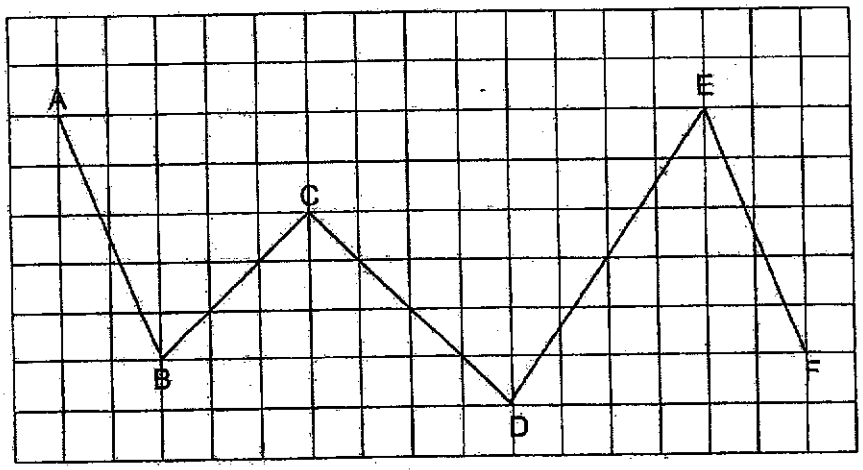
17. Look at the figure below.
AB, BC, CD, DE and EF are straight lines.




(a) Name a pair of parallel lines.

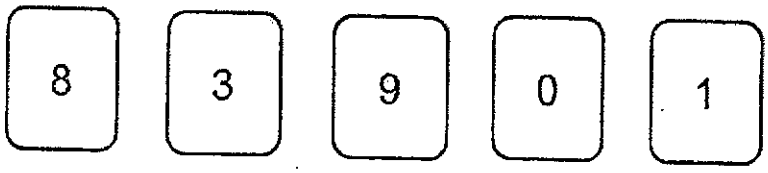
Ans: _____ and _____

(b) Name a pair of perpendicular lines.

Ans: _____ and _____

---

18. Cheva formed 2 different numbers using the digit cards below.
Each digit can only be used once for each number.




(a) For the first number, he formed the smallest 4-digit odd number.
What number did he form?

Ans: (a) _____

(b) For the second number, he formed the greatest 3-digit even number between 800 and 900.
What number did he form?

Ans: (b) _____

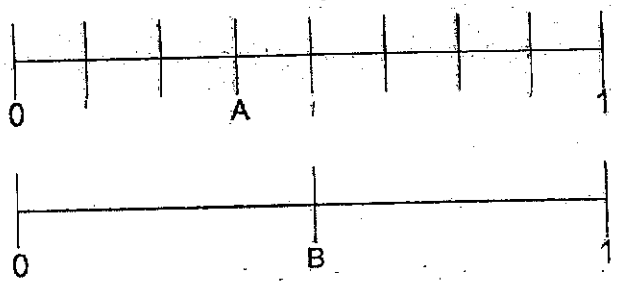
---

19. A wallet costs $56.90.
A water bottle costs $12.50 less than the wallet.
How much does the water bottle cost?

Ans: $ _____

---

20. Look at the number lines below.




Find the difference between B and A.

Ans: _____

21. Li Meng started doing her homework at 14 30.
She took 1 h to write an English composition.
She then took another 1 h 35 min to solve some word problems.
What time did she complete her homework?

Ans: _____

22. There were some students in the library at first.
18 students left the library.
13 students then went into the library.
In the end, there were 312 students left in the library.
How many students were there in the library at first?

Ans: _____

23. Joey has 76 sweets.
She packs all the sweets into bags of 3 sweets or bags of 5 sweets.
She has 20 bags of sweets after packing.
How many bags of 3 sweets are there?

Ans: _____

**Long-Answer Questions (LAQ)**

For questions **24** to **28**, 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.

(17 marks)

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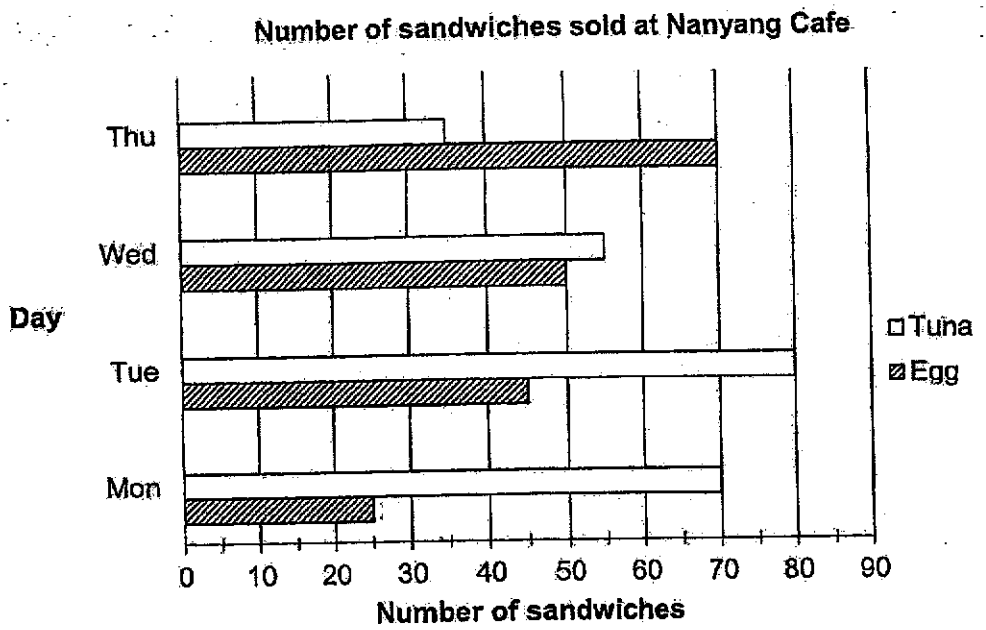
24. The bar graph shows the number of egg sandwiches and tuna sandwiches sold at Nanyang Cafe from Monday to Thursday.




(a) How many more tuna sandwiches than egg sandwiches were sold on Tuesday?

Ans: (a) _____ [1]

(b) Which day had the greatest difference in the number of egg sandwiches and tuna sandwiches sold?

Ans: (b) _____ [1]

(c) The cafe sold each egg sandwich for $2.
What was the total amount collected from the sale of egg sandwiches on Wednesday and Thursday?

Ans: (c) _____ [1]

25. Ali had 128 more stickers than Bala at first.
Ali gave 25 stickers to Bala.
How many more stickers did Ali have than Bala in the end?

Ans: _____ [3]

26. There was a total of 756 visitors at the zoo.
There were 3 times as many children as adults.
How many more children than adults were there?

Ans: _____ [3]

27. A total of 382 packets of biscuits were collected for a donation drive on Saturday and Sunday.
These biscuits collected were given to families.
Each family was given 6 packets of biscuits.

(a) What was the greatest number of families that received the biscuits?

Ans: (a) _____ [2]

(b) 22 more packets of biscuits were collected on Sunday than on Saturday.
How many packets of biscuits were collected on Saturday?

Ans: (b) _____ [2]

28. A pail contains 5320 ml of water.
Meera poured away 4470 ml of water from the pail.

(a) How much water was left in the pail?

Ans: (a) _____ [2]

(b) Meera poured all the water left in the pail equally into 5 identical empty jugs.
How much water did she pour into each jug?

Ans: (b) _____ [2]

End of Paper

**Multiple Choice Questions (MCQ)**

Questions 1 to 5 carry 1 mark each. 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 (1, 2, 3 or 4) in the bracket ( ) provided.

(5 marks)

1. What is three thousand, six hundred and six written as a numeral?

   (1) 3666
   (2) 3366
   (3) 3606
   (4) 3660

( 3 )

2. What is the missing number in the equation below?

   7023 = 7000 + ☐ + 3

   (1) 203
   (2) 200
   (3) 23
   (4) 20

( 4 )



3. Arrange the fractions in order from the greatest to the smallest.

$\frac{1}{2}$ , $\frac{2}{8}$ , $\frac{5}{7}$

| | Greatest | | | Smallest |
|---|---|---|---|---|
| (1) | $\frac{5}{7}$ | $\frac{1}{2}$ | $\frac{2}{8}$ | |
| (2) | $\frac{5}{7}$ | $\frac{2}{8}$ | $\frac{1}{2}$ | |
| (3) | $\frac{2}{8}$ | $\frac{1}{2}$ | $\frac{5}{7}$ | |
| (4) | $\frac{2}{8}$ | $\frac{5}{7}$ | $\frac{1}{2}$ | |

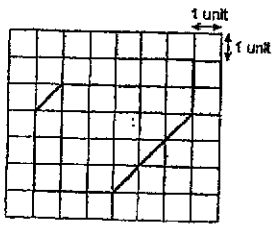
( 1 )

4. Express 2080 g in kilograms and grams.

   (1) 2 kg 8 g
   (2) 2 kg 80 g
   (3) 20 kg 8 g
   (4) 20 kg 80 g

( 2 )

5. Each ☐ has an area of 1 square unit.




What is the area of the figure above?

   (1) 23 square units
   (2) 21 square units
   (3) 19 square units
   (4) 18 square units

( 2 )



**Short-Answer Questions (SAQ)**

Questions 6 to 13 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(8 marks)

6. What is the missing denominator?

$\frac{3}{5} \xrightarrow{\times 3} \frac{9}{?}$

$5 \times 3 = 15$

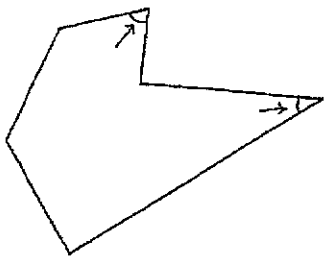
Ans: 15

7. Express $\frac{14}{35}$ in its simplest form.

$\frac{14}{35} \xrightarrow{\div 7} \frac{2}{5}$

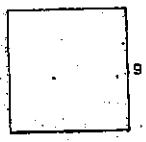
Ans: $\frac{2}{5}$

8. How many acute angles are there in the figure below?



Ans: 2

9. Find the perimeter of the square.




9+9+9+9 = 36

or

9 × 4 = 36

Ans: 36 cm

10. The length of a rectangular grass patch is 8 m.
Its breadth is 7 m.
What is the area of the grass patch?

Area = 8 × 7
= 56

Ans: 56 m²

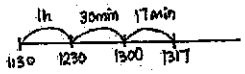
11. Write the time 00 10 in 12-hour clock.

00 10 is 12:00 am
(after midnight)

Ans: 12:10am



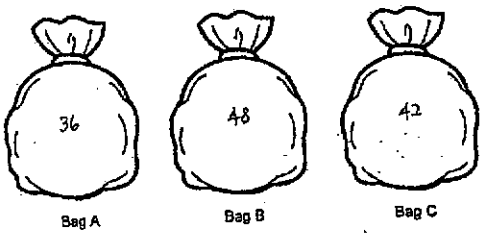
12. Axel started to cycle at 11 30.
He finished cycling at 13 17.
How long did he cycle?




1h + 30 min + 17 min = 1h 47min

Ans: 1 h 47 min

13. There are 3 bags, A, B and C.
All the pens in each bag are put into groups of 6.




Bag A has 36 pens.
It contains the least number of pens.
The number of pens in Bag B is between 45 and 50.
Bag C has fewer pens than Bag B.
How many pens are there in Bag C?

List all multiples of 6

36, 42, 48

Ans: 42



**Short-Answer Questions (SAQ)**
Questions 14 to 23 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.

(20 marks)

14. Look at the number patterns below.
Find the missing number in each number pattern.

(a) 3699 (+10), 3709 (+100), 3809 (+10), 3819 (+100), 3919 (+10), 3929 (+100), ? , 4039 , 4139

3929 + 100 = 4029

Ans: (a) 4029

(b) ? , 7489 , 7539 , 7589 , 7639 , 7689 (−50 each)

7489 − 50 = 7439

Ans: (b) 7439

15. (a) Find the sum of 560 and 1320.

1320
+ 560
1880

Ans: (a) 1880

(b) 8001 − ? = 2417

7 9 11
8001
−2417
5584

Ans: (b) 5584



16. (a) Michelle bought 5 trays of eggs.
Each tray had 8 eggs.
How many eggs did Michelle buy altogether?

5 × 8 = 40

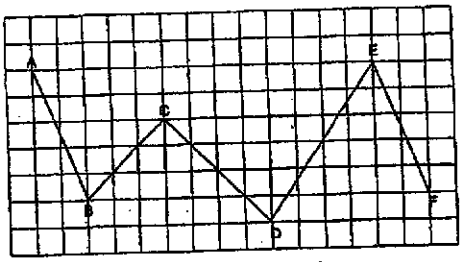
Ans: (a) 40

(b) Michelle used 4 eggs to bake each cake.
How many cakes could she bake with all the eggs that she bought?

40 ÷ 4 = 10

Ans: (b) 10

17. Look at the figure below.
AB, BC, CD, DE and EF are straight lines.




(a) Name a pair of parallel lines.

Ans: AB and EF

(b) Name a pair of perpendicular lines.

Ans: BC and CD

18. Cheva formed 2 different numbers using the digit cards below.
Each digit can only be used once for each number.

(a) For the first number, he formed the smallest 4-digit odd number.
What number did he form?

1 0 3 9
↑ ↑
Smallest greatest odd

Do not start with '0'.

Ans: (a) 1039

(b) For the second number, he formed the greatest 3-digit even number between 800 and 900.
What number did he form?

8 9 0
↑
smallest even

Ans: (b) 890

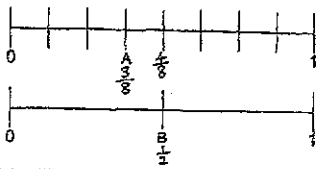
19. A wallet costs $56.90.
A water bottle costs $12.50 less than the wallet.
How much does the water bottle cost?

$56.90 - $12.50 = $44.40

Ans: $ 44.40



20. Look at the number lines below.

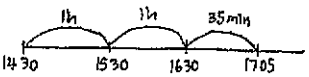



Find the difference between B and A.

$\frac{1}{2} - \frac{3}{8}$
$= \frac{4}{8} - \frac{3}{8}$
$= \frac{1}{8}$

Ans: $\frac{1}{8}$ or equivalent

21. Li Meng started doing her homework at 14 30.
She took 1 h to write an English composition.
She then took another 1 h 35 min to solve some word problems.
What time did she complete her homework?




Ans: 17 05 or 5:05 pm



22. There were some students in the library at first.
18 students left the library.
13 students then went into the library.
In the end, there were 312 students left in the library.
How many students were there in the library at first?

312 - 13 = 299
299 + 18 = 317

Ans: 317

23. Joey has 76 sweets.
She packs all the sweets into bags of 3 sweets or bags of 5 sweets.
She has 20 bags of sweets after packing.
How many bags of 3 sweets are there?

Method 1

→ 12 + 8 = 20 ←

| No. of bags of 3 sweets | No. of sweets | No. of bags of 5 sweets | No. of sweets | Total no. of sweets |
|---|---|---|---|---|
| 12 | 12 x 3 = 36 | 8 | 8 x 5 = 40 | 36 + 40 = 76 |

Method 2

Suppose all are bags of 3 sweets
20 x 3 = 60
76 - 60 = 16
5 - 3 = 2
16 ÷ 2 = 8
20 - 8 = 12

Method 3

Suppose all are bags of 5 sweets
20 x 5 = 100
100 - 76 = 24
5 - 3 = 2
24 ÷ 2 = 12

Ans: 12

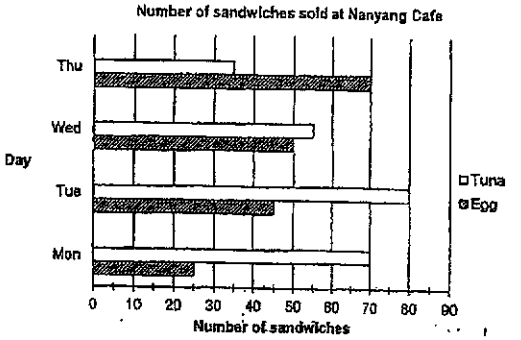


Long-Answer Questions (LAQ)

For questions 24 to 26, 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.

(17 marks)

24. The bar graph shows the number of egg sandwiches and tuna sandwiches sold at Nanyang Cafe from Monday to Thursday.




(a) How many more tuna sandwiches than egg sandwiches were sold on Tuesday?

80 - 45 = 35

Ans: (a) 35 [1]

(b) Which day had the greatest difference in the number of egg sandwiches and tuna sandwiches sold?

Ans: (b) Monday [1]

(c) The cafe sold each egg sandwich for $2.
What was the total amount collected from the sale of egg sandwiches on Wednesday and Thursday?

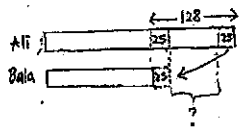
70 + 50 = 120
120 x 2 = 240

Ans: (c) $240 [1]



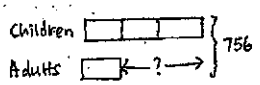
25. Ali had 128 more stickers than Bala at first.
Ali gave 25 stickers to Bala.
How many more stickers did Ali have than Bala in the end?

25 + 25 = 50
128 - 50 = 78




Ans: 78 [3]

26. There was a total of 756 visitors at the zoo.
There were 3 times as many children as adults.
How many more children than adults were there?




756 ÷ 4 = 189 (1 unit)
189 x 2 = 378 (2 units)

Ans: 378 [3]



27. A total of 382 packets of biscuits were collected for a donation drive on Saturday and Sunday.
These biscuits collected were given to families.
Each family was given 6 packets of biscuits.

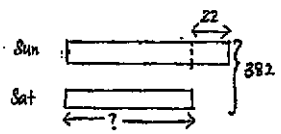
(a) What was the greatest number of families that received the biscuits?

382 ÷ 6 = 63 R4

Ans: (a) 63 [2]

(b) 22 more packets of biscuits were collected on Sunday than on Saturday.
How many packets of biscuits were collected on Saturday?

382 - 22 = 360
360 ÷ 2 = 180

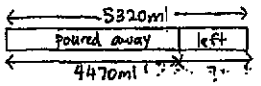



Ans: (b) 180 [2]



28. A pail contains 5320 ml of water.
Meera poured away 4470 ml of water from the pail.

(a) How much water was left in the pail?




5320 - 4470 = 850

Ans: (a) 850ml [2]

(b) Meera poured all the water left in the pail equally into 5 identical empty jugs.
How much water did she pour into each jug?

850 ÷ 5 = 170

Ans: (b) 170 ml [2]

End of Paper