



NANYANG PRIMARY SCHOOL

**FIRST CONTINUAL EXAMINATION
2018**

PRIMARY 6

**MATHEMATICS
PAPER 1
(BOOKLET A)**

Total Duration for Booklets A and B: 1 hour

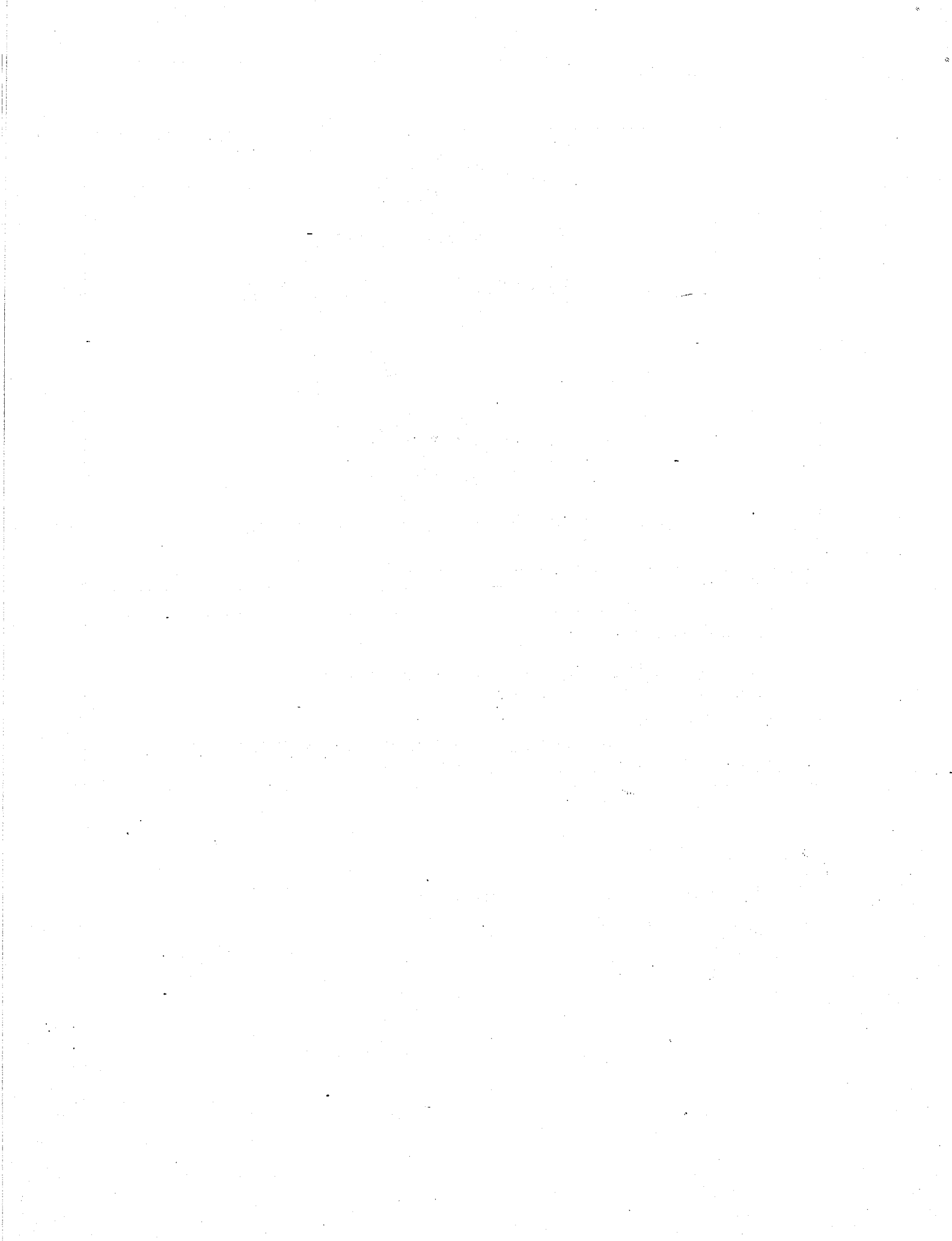
Additional materials: Optical Answer Sheet (OAS)

INSTRUCTIONS TO PUPILS

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Shade your answers in the Optical Answer Sheet (OAS) provided.
5. The use of calculators is **NOT** allowed.

Name: _____ ()

Class: Primary 6 ()



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) and shade your answer on the Optical Answer Sheet. (20 marks)

1 Find the value of 140×4000 .

- (1) 5600
- (2) 56 000
- (3) 560 000
- (4) 5 600 000

2 Find the value of $\frac{7}{10} - \frac{1}{4} + \frac{1}{10}$.

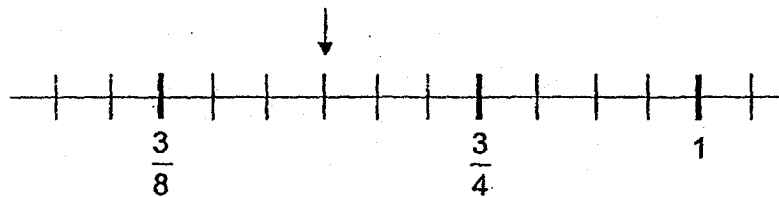
- (1) $\frac{7}{20}$
- (2) $\frac{11}{20}$
- (3) $\frac{17}{20}$
- (4) $\frac{21}{20}$

- 3 Mr Suresh had $\frac{7}{9}$ kg of sugar. He used $\frac{1}{3}$ of it to bake some cookies.

How much sugar did he use?

- (1) $\frac{7}{27}$ kg
(2) $\frac{12}{27}$ kg
(3) $\frac{14}{27}$ kg
(4) $\frac{28}{27}$ kg

- 4 In the number line below, what is the value indicated by the arrow?



- (1) $\frac{3}{6}$
(2) $\frac{6}{8}$
(3) $\frac{6}{16}$
(4) $\frac{9}{16}$

- 5 $\frac{7}{8}$ of a cake was shared equally among 6 people. What fraction of the cake did each person receive?

(1) $\frac{4}{21}$

(2) $\frac{7}{48}$

(3) $\frac{21}{4}$

(4) $\frac{48}{7}$

- 6 Find the value of $0.1 \div 100$.

(1) 10

(2) 100

(3) 0.001

(4) 0.01

7 Express 2045 cm in m.

- (1) 2.45 m
- (2) 2.045 m
- (3) 20.45 m
- (4) 20.045 m

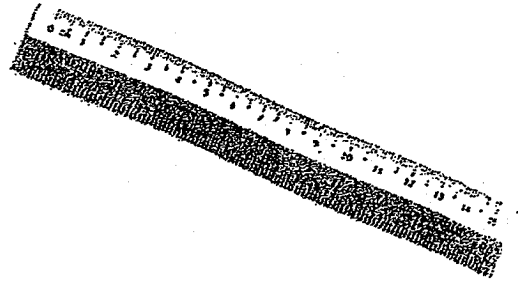
8 There are 50 pupils in a class. 32 of them are boys. What percentage of the pupils are boys?

- (1) 18%
- (2) 32%
- (3) 36%
- (4) 64%

9 Simplify $24q - 8q + 3q$.

- (1) $19q$
- (2) 19
- (3) $13q$
- (4) 13

10 Which of the following is likely to be the mass of a 15-cm plastic ruler?



- (1) 500 g
- (2) 50 kg
- (3) 5 kg
- (4) 5 g

11 Look at the pattern below.

3	9
12	6

4	?
16	8

5	15
?	10

6	18
24	12

7	21
28	14

Find the sum of the two missing numbers.

- (1) 8
- (2) 12
- (3) 20
- (4) 32

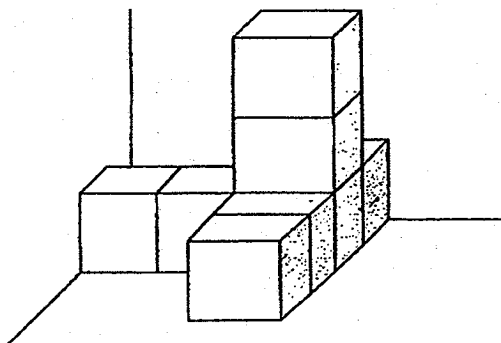
- 12 Sam was given some ribbon to tie 2 parcels. He used $\frac{7}{8}$ m of ribbon to tie the first parcel. The length of ribbon used for the second parcel was twice the length of ribbon used for the first parcel. How many metres of ribbon did he use in all?

- (1) $\frac{7}{16}$ m
- (2) $\frac{21}{16}$ m
- (3) $\frac{14}{8}$ m
- (4) $\frac{21}{8}$ m

- 13 In a music store, 250 CDs were sold in January. In February, 150 CDs were sold. What was the percentage decrease in the sale of the CDs?

- (1) 25%
- (2) 37.5%
- (3) 40%
- (4) 60%

- 14 The solid below is built with 2 cm cubes. How many more such cubes must be added to form a bigger solid measuring 8 cm by 8 cm by 8 cm?

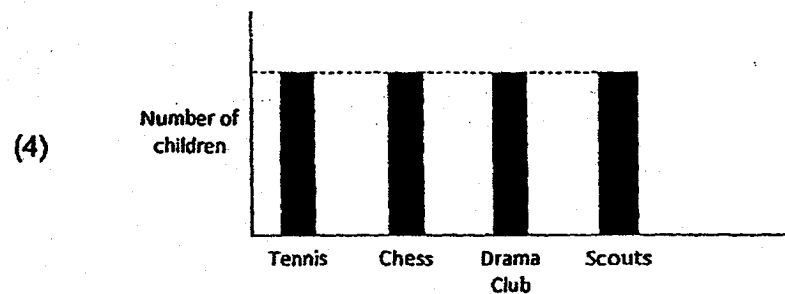
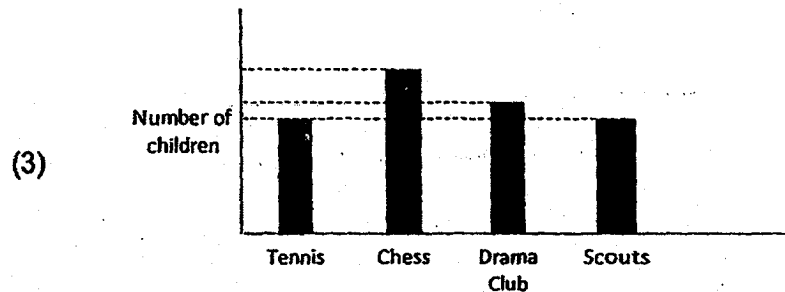
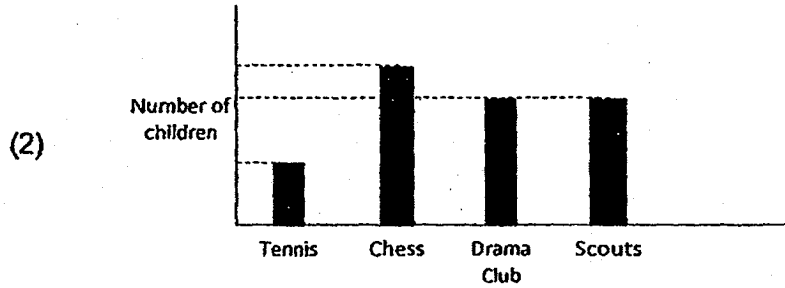
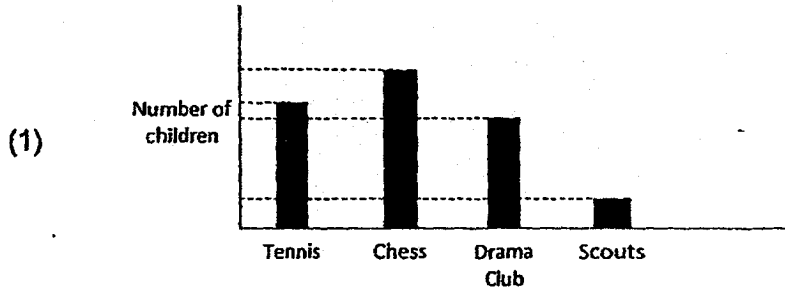


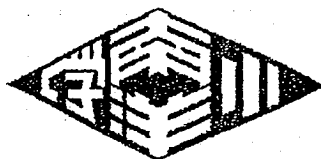
- (1) 56
- (2) 64
- (3) 216
- (4) 504

- 15 The total number of children in Tennis, Chess, Drama Club and Scouts was 200. The table below shows the number of children in Tennis, Chess and Drama Club.

CCA	Tennis	Chess	Drama Club	Scouts
Number of children	45	60	50	?

Which bar graph best represents the information in the table?





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**FIRST CONTINUAL EXAMINATION
2018**

PRIMARY 6

**MATHEMATICS
PAPER 1
(BOOKLET B)**

Total Duration for Booklets A and B: 1 hour

INSTRUCTIONS TO PUPILS

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.
5. The use of calculators is **NOT** allowed.

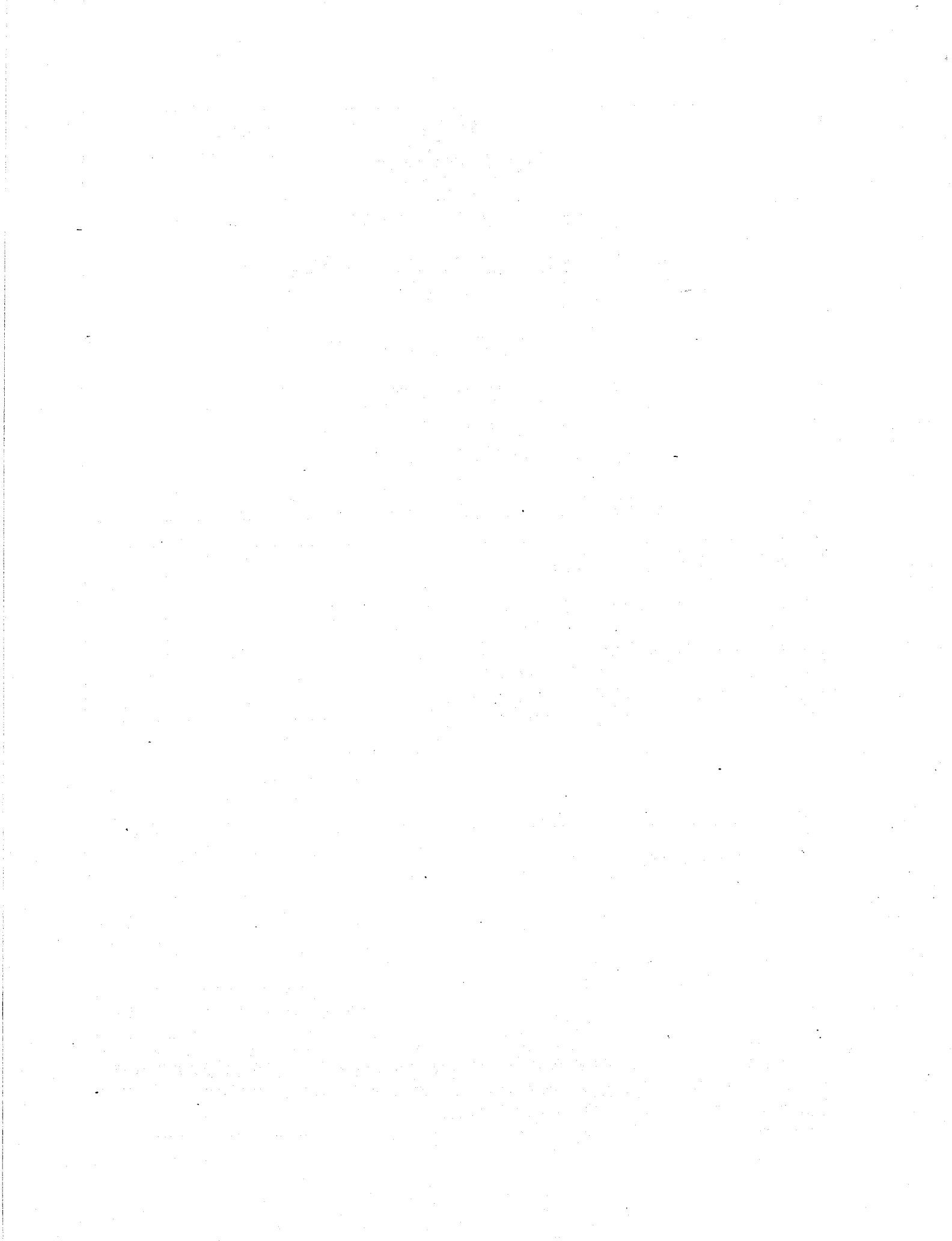
Name: _____ ()

Class: Primary 6 ()

Booklet B

/ 25

Any query on marks awarded should be raised by 7 March 2018. We seek your understanding in this matter as any delay in the confirmation of marks will lead to delays in the generation of results.



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)

16 Find the value of $70 \div (6 + 8 \div 2) + 5$.

Ans: _____

17 A shopkeeper filled some empty bottles with 24ℓ of barley drink. He filled each bottle with $\frac{2}{3}$ ℓ of barley drink. How many bottles did he fill?

Ans: _____

- 18 Andrew had \$280. He spent 40% of it on a watch. How much did he spent on the watch?

Ans: \$ _____

- 19 Find the missing value in the equation.

$$42 \div \boxed{} = 6$$

Ans: _____

- 20 Find the value of $\frac{12+3n}{2}$ when $n = 6$.

Ans: _____

Questions 21 to 30 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)

- 21 At first, Josh and May had some marbles each. After Josh gave $\frac{1}{4}$ of his marbles to May. May had 3 times as many marbles as him. May then gave Josh 12 marbles. In the end, each of them had an equal number of marbles. How many marbles did May have at first?

Ans: _____

- 22 How many ways can the digits 2, 3, 5 and 0 be arranged into 4-digit numbers that are multiples of 5? For each number, each digit can only be used once.

Ans: _____

- 23 Mrs Cheng wants to pack $\frac{3}{4}$ kg of flour into small packets. Each small packet contains $\frac{1}{5}$ kg of flour. At most, how many of such small packets of flour can she pack?

Ans: _____

- 24 Joanne bought 40 chocolate tarts, some cheese tarts and some blueberry tarts for her party. Each tart cost \$2 and she paid \$200 for all the tarts. Everyone in the party took 2 tarts each and there was no tarts left.

Each statement below is either true, false or not possible to tell from the information given. For each statement, put a tick (✓) in the correct column.

Statement	True	False	Not possible to tell
There were 50 people at the party.			
Joanne bought 6 times as many cheese tarts as blueberry tarts.			

- 25 A file cost \$1.20 more than a notebook. A pen cost twice as much as the file. The total cost of the three items was \$11.60. What was the cost of the file?

Ans: \$ _____

- 26 Thana had some hairclips. 25% of Thana's hairclips were blue. She had 10 blue hairclips. How many hairclips did she have altogether?

Ans: _____

- 27 The monthly salary of Mr Gill is the same each month. In November, Mr Gill spent \$1600 of his monthly salary and saved the rest. In December, he increased his spending by 30% and his savings decreased by 50%. How much did he save in November?

Ans: \$ _____

- 28 The cost of 3 identical watches and 4 identical belts is \$371. The cost of 3 such watches and 2 such belts is \$298. What is the cost of 1 such belt?

Ans: \$ _____

- 29 The mass of a pineapple is f kg. The mass of a durian is twice as heavy as the pineapple. The mass of a watermelon is 3 kg more than the mass of the durian. What is the mass of the watermelon. Give your answer in terms of f in the simplest form.

Ans: _____ kg

- 30 Mrs Lim had d m of cloth. She used 2 m to sew a blouse. She used the remaining cloth to sew 4 identical dresses. If Mrs Lim had 22 m of cloth, find the length of cloth she used to make 1 dress.

Ans: _____ m

End of Paper



NANYANG PRIMARY SCHOOL

**FIRST CONTINUAL EXAMINATION
2018**

PRIMARY 6

**MATHEMATICS
PAPER 2**

Duration: 1 hour 30 minutes

INSTRUCTIONS TO PUPILS

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.
5. The use of an approved calculator is expected, where appropriate.

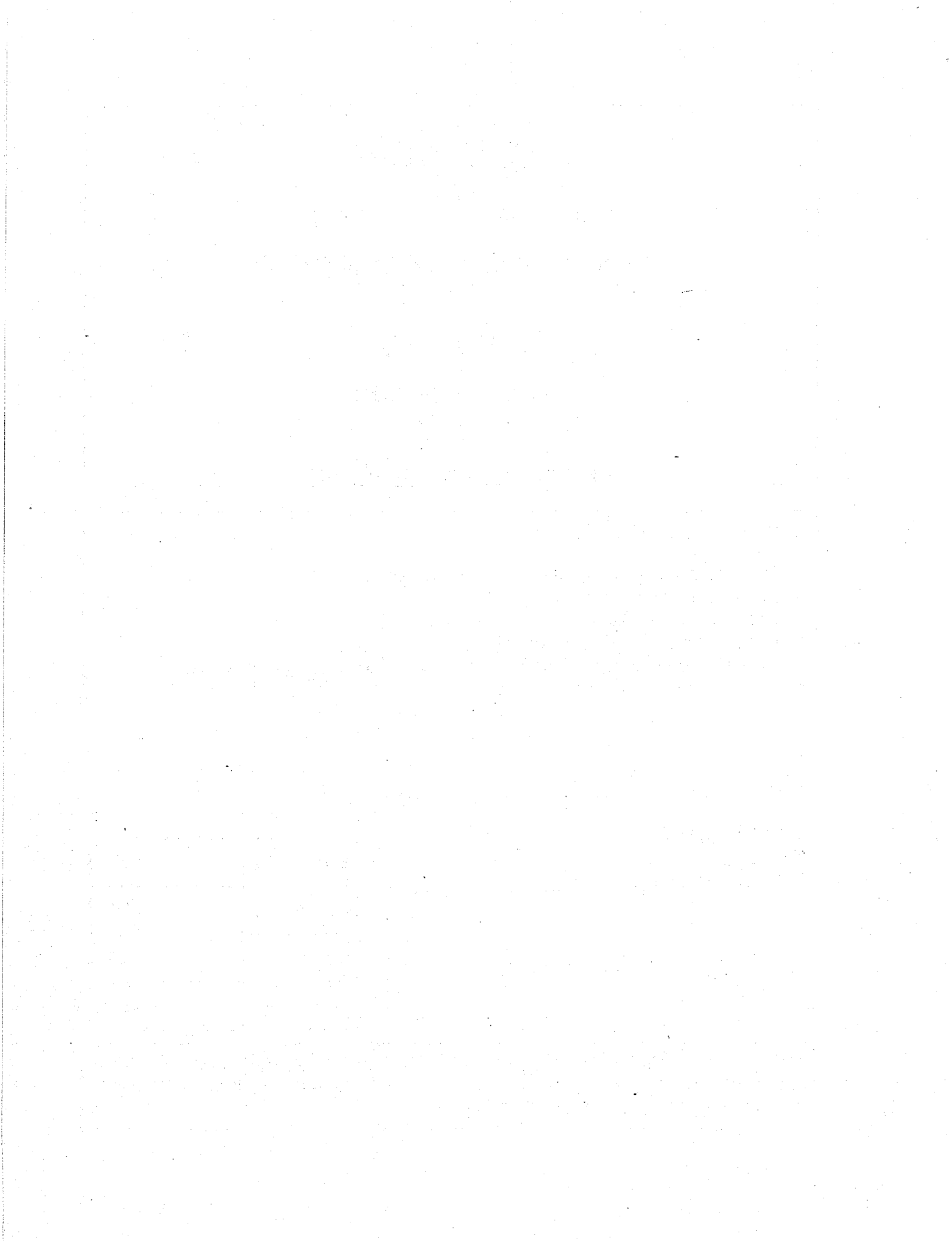
Name: _____ ()

Class: Primary 6 ()

Parent's Signature: _____

Booklet A	/ 20
Booklet B	/ 25
Paper 2	/ 55
Total	/ 100

Any query on marks awarded should be raised by **7 March 2018**. We seek your understanding in this matter as any delay in the confirmation of marks will lead to delays in the generation of results.



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. (10 marks)

- 1 Suhailah and Ramy went jogging at a park. Suhailah jogged $1\frac{1}{5}$ km and another $2\frac{1}{3}$ km after resting for some time. Ramy jogged $1\frac{1}{4}$ km less than the total distance that Suhailah jogged. How far did Ramy jog? Give your answer as a mixed number in the simplest form.

Ans: _____ km

- 2 Susan had 3 ℓ of water. She drank $\frac{3}{7}$ of it. How many litres of water did she drink?

Ans: _____ ℓ

- 3 Six children took turns to sit on 2 swings from 2 p.m. to 2.45 p.m. At any time, 2 children sat on the swings while the other 4 children watched. Each of them spent the same amount of time sitting on the swing. How many minutes did each child sit on the swing?

Ans: _____ min

- 4 The usual price of a pair of shoes was \$180. Sally bought it at a 25% discount during a sale. How much did she pay for the pair of shoes after discount?

Ans: \$ _____

- 5 The table below shows the ages of 4 children. Whose age is the closest to the average age of the 4 children?

Name	Age in years
Alicia	7
Bernice	9
Chris	13
Danny	10

Ans: _____

For questions 6 to 17, 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. (45 marks)

- 6 The thickness of a dictionary was $\frac{1}{8}$ of the height of a table. The height of 3 such tables when stacked on top of one another was $\frac{21}{8}$ m.
- What is the total thickness of 2 such dictionaries?

Ans: _____ [3]

- 7 At a pet shop, $\frac{1}{4}$ of the animals were cats, 45% of the animals were dogs, 18% of the animals were rabbits and the rest were hamsters. There were 24 hamsters. How many animals were there at the pet shop?

Ans: _____ [3]

- 8** A machine could produce 120 000 boxes of chocolates in 6 hours. After the machine was improved and upgraded, the machine can now produce 9000 more boxes of chocolates in every 2 hours. At this new rate, how many boxes of chocolates does the machine produce in one hour?

Ans: _____ [3]

- 9** A tank measuring 35 cm long and 25 cm wide was filled with water to a height of 0.18 m. When 2.6 l of water was added into the tank, 850 ml of water overflowed from the tank. What was the capacity of the tank?

Ans: _____ [3]

10 Mr Chua bought 3 identical pairs of socks and less than 5 identical pairs of shoes. The total cost of the socks was \$75 and the average price of all the items that he had bought was \$78.60. The total amount that he had spent on the shoes was a whole number in dollars.

- (a) How many pairs of shoes did he buy?
- (b) What was the average price of the shoes?

Ans: (a) _____ [1]

(b) _____ [2]

- 11 Wei Yan had some marbles at first. He gave $\frac{3}{8}$ of them to his friends and $\frac{5}{7}$ of the remaining marbles to his brother. His cousin then gave him 408 marbles. In the end, he had twice as many marbles as he had at first. How many marbles did Wei Yan have at first?

Ans: _____ [4]

12. At a concert, 45% of the people were adults and $\frac{1}{5}$ of the remaining people were girls. There were 660 more boys than girls. How many people were at the concert?

Ans: _____ [4]

- 13** A baker baked 300 cookies. 60% of the cookies baked were chocolate chip cookies and the rest were lychee cookies. Some of the chocolate chip cookies were sold and now the percentage of the chocolate chip cookies decreased to 40% of the remaining cookies. How many chocolate chip cookies were sold?

Ans: _____ [4]

14 Amy had $\$10y$. She had $\$24$ less than Cindy. Linda had half as much as Amy. They bought a present which cost $\$(4y+5)$ for their friend.

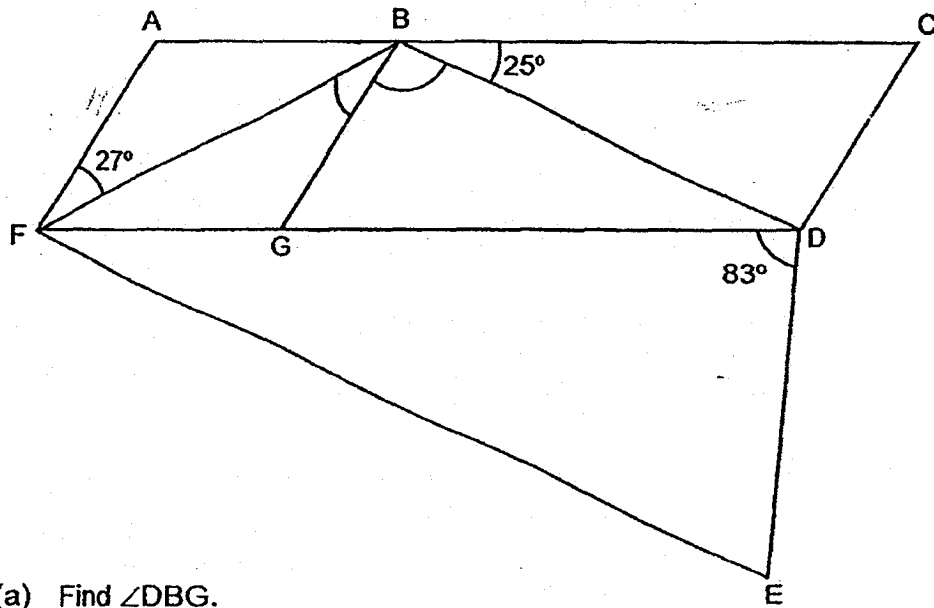
(a) How much did they have altogether at first? Give your answer in terms of y in the simplest form.

(b) If $y = 7$, how much did they have left in total after buying the present?

Ans: (a) _____ [2]

(b) _____ [2]

- 15 In the figure, $ABGF$ is a rhombus, $BCDG$ is a parallelogram and $BDEF$ is a trapezium. ABC and FGD are straight lines and BD is parallel to FE . $\angle AFB = 27^\circ$, $\angle CBD = 25^\circ$ and $\angle GDE = 83^\circ$.



- (a) Find $\angle DBG$.
- (b) Find $\angle DEF$.

Ans: (a) _____ [2]

(b) _____ [2]

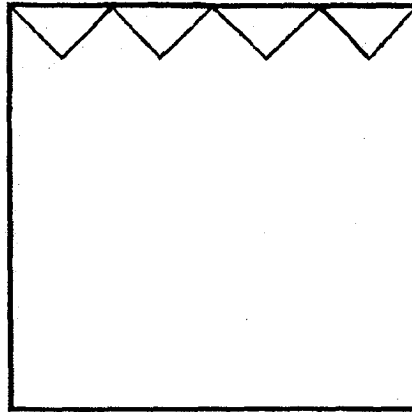
- 16 The table below shows the number of pupils who are left-handed in a school. The number of pupils who are right-handed is not shown in the table. The ratio of the number of boys who are left-handed to the number of boys who are right-handed is 2 : 33.

	Left-handed	Right-handed
Boys	48	
Girls	42	

- (a) How many boys are right-handed?
- (b) 95% of the pupils are right-handed. What is the ratio of the number of girls to the number of boys to the total number of pupils? Give your answer in the simplest form.
- (c) Some girls are then transferred into the school from another school. Did the percentage of boys who are right-handed increase, decrease or remain the same compared to the total number of pupils?

Ans: (a) _____ [1]
(b) _____ [3]
(c) _____ [1]

- 17 Mrs Lau had some cloth which she had cut into identical right-angled isosceles triangles. Each triangular piece of cloth had an area of 36 cm^2 . She then sewed these triangles onto the square piece of cloth as shown below.



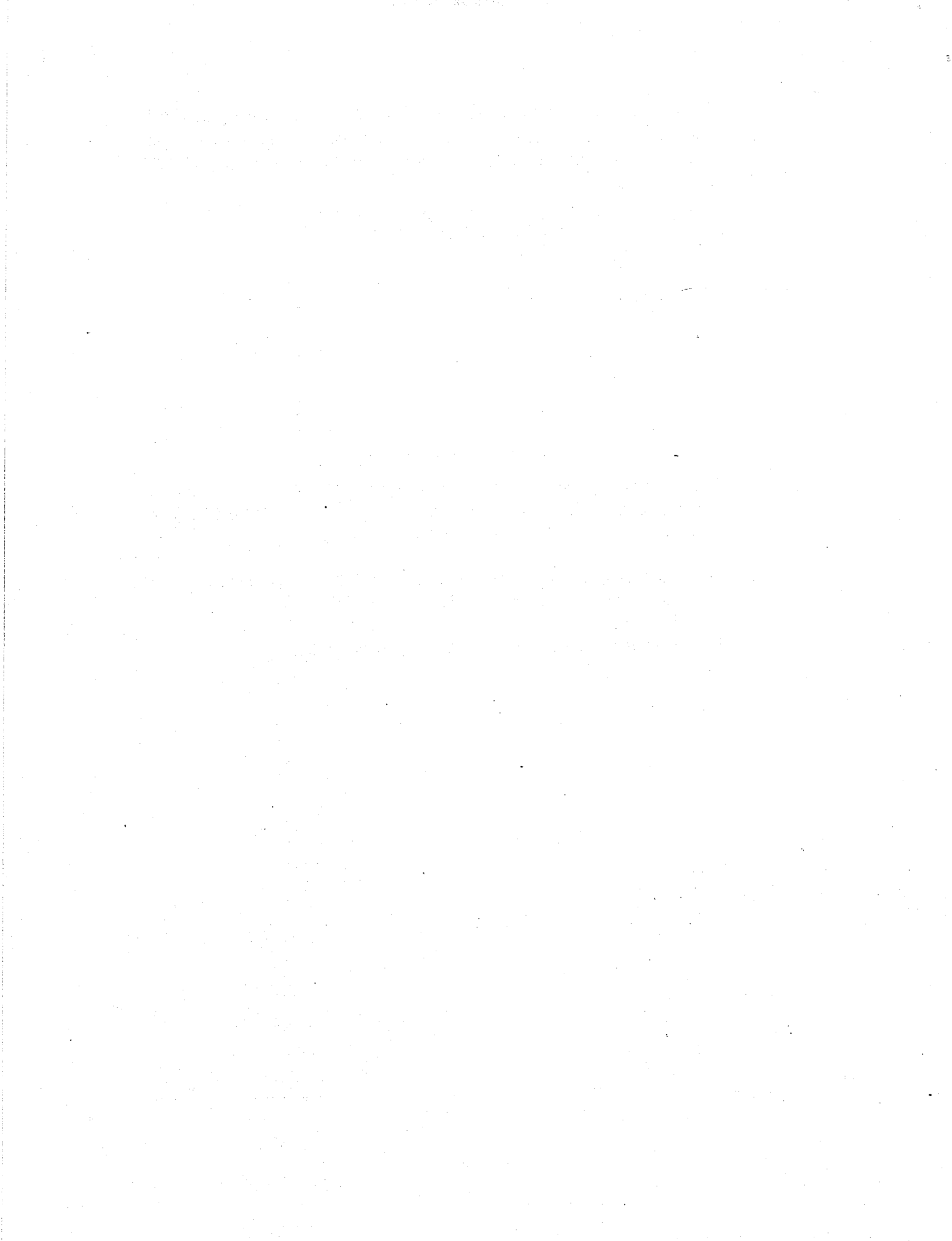
She continued to sew these triangular pieces of cloth onto the square piece of cloth without any overlaps. No part of any of the triangular piece of cloth was outside of the square piece of cloth.

- (a) How many of such triangular pieces of cloth did she sew to cover 1 face of the square piece of cloth **completely**?
- (b) What is the perimeter of the square piece of cloth?

Ans: (a) _____ [2]

(b) _____ [3]

End of Paper



SCHOOL : NANYANG PRIMARY SCHOOL
LEVEL : PRIMARY 6
SUBJECT : MATH
TERM : 2018 CA1

CONTACT : CALL MR GAN @ 9299 8971, 8606 5443,

PAPER 1 BOOKLET A

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
3	2	1	4	2	3	3	4	1	4

Q11	Q12	Q13	Q14	Q15
4	4	3	1	3

PAPER 1 BOOKLET B

Q16)	12
Q17)	36
Q18)	\$112
Q19)	7
Q20)	15
Q21)	32
Q22)	10
Q23)	3
Q24)	True False
Q25)	\$3.20
Q26)	40
Q27)	\$960
Q28)	\$36.50
Q29)	$(3+2f)$ kg
Q30)	5m

PAPER 2

Q1)	$1\frac{1}{5} + 2\frac{1}{3} = \frac{38}{15}$ $\frac{38}{15} - 1\frac{1}{4} = \frac{217}{60}$ km
Q2)	$3 \times \frac{3}{7} = \frac{12}{7}$ L

Q3)	$45 \div 6 = 7.5$ $7.5 \times 2 = 15 \text{ min}$				
Q4)	$100\% \rightarrow \$180$ $1\% \rightarrow \$180 \div 100 = \1.80 $100\% - 25\% = 75\%$ $75\% \rightarrow \$180 \times 75 = \135				
Q5)	$7 + 9 + 13 + 10 = 39$ $39 \div 4 = 9.75$ $9.75 \approx 10$ ANS : Danny				
Q6)	$8 \times 3 = 24$ $24 \text{ units} \rightarrow 21/8$ $1 \text{ unit} \rightarrow 21/8 \div 24 = 7/64$ $2 \text{ units} \rightarrow 7/64 \times 2 = 7/32 \text{ m}$				
Q7)	$1/4 = 25\%$ $100\% - 25\% - 45\% - 18\% = 12\%$ $12\% \rightarrow 24$ $1\% \rightarrow 24 \div 12 = 2$ $100\% \rightarrow 2 \times 100 = 200$				
Q8)	$6\text{h} \rightarrow 120000$ $1\text{h} \rightarrow 120000 \div 6 = 20000$ $2\text{h} \rightarrow 9000$ $1\text{h} \rightarrow 4500$ $20000 + 4500 = 24500$				
Q9)	$0.18\text{m} = 18\text{cm}$ $2.6\text{L} = 2600\text{ml}$ $2600 - 850 = 1750$ $1750\text{ml} = 1750\text{cm}^3$ $1750 \div 35 \div 25 = 2$ $18 + 2 = 20$ $35 \times 25 \times 20 = 17500\text{cm}^3$				
Q10)	<table style="border-collapse: collapse;"> <tr> <td style="border-right: 1px solid black; padding-right: 5px;">Socks $\rightarrow 3 \text{ pairs}$</td> <td rowspan="2" style="font-size: 2em; padding: 0 10px;">}</td> <td rowspan="2" style="vertical-align: middle;">Average \$78.60</td> </tr> <tr> <td style="border-right: 1px solid black; padding-right: 5px;">Shoes $\rightarrow ?$</td> </tr> </table> $\$78.60 \times 5 = \393 $5 - 3 = 2$ $\$393 - \$75 = \$318$ $\$318 \div 2 = \159 a) 2 b) \$159	Socks $\rightarrow 3 \text{ pairs}$	}	Average \$78.60	Shoes $\rightarrow ?$
Socks $\rightarrow 3 \text{ pairs}$	}	Average \$78.60			
Shoes $\rightarrow ?$					

Q11) $1 - 3/8 = 5/8$

$5/7 \times 5/8 = 25/56$

$5/8 - 25/56 = 5/28$

$2 - 5/28 = 51/28$

51 units \rightarrow 408

1 unit \rightarrow $408 \div 51 = 8$

28 units \rightarrow $8 \times 28 = 224$

Q12) $100\% - 45\% = 55\%$ (B)

$1/5 \times 55\% = 11\%$ (G)

$44\% - 11\% = 33\%$

33% \rightarrow 660

100% \rightarrow $660 \div 33 \times 100 = 200$

Q13) $100\% - 60\% = 40\%$ (L)

100% \rightarrow 300

(L) 40% \rightarrow $300 \div 10 \times 4 = 120$

(C) 60% \rightarrow $300 \div 10 \times 6 = 180$

(L) 60% \rightarrow 120

100% \rightarrow $120 \div 60 \times 100 = 200$

$300 - 200 = 100$ (sold)

Q14) A \rightarrow \$10y

C \rightarrow \$10y + \$24

L \rightarrow $\$10y \div 2 = \$10y/2$

Total \rightarrow $\$10y + \$10y + 24 + \$10y/2 = \$(20y + 24 + 10y/2)$

Total \rightarrow $\$(20 \times 7 + 24 + 10 \times 7/2)$

$= \$(140 + 24 + 10 \times 7/2)$

$= \$(140 + 24 + 35) = 199$

Present \rightarrow $\$(4 \times 7 + 5) = \$28 + \$5 = \33

$\$199 - \$33 = \$166$

a) $\$(20y + 24 + 10y/2)$

b) \$166

Q15) a) $\angle DBG \rightarrow 180^\circ - 27^\circ - 27^\circ - 25^\circ = 101^\circ$

b) $101^\circ + 27^\circ = 128^\circ$ ($\angle FBD$)

$180^\circ - 128^\circ - 27^\circ = 25^\circ$ ($\angle DFE$)

$360^\circ - 128^\circ - 27^\circ - 25^\circ - 83^\circ = 72^\circ$ ($\angle DEF$)

a) 101°

b) 72°

Q16) a) 2 units \rightarrow 48

1 unit \rightarrow $48 \div 2 = 24$

33 units \rightarrow $24 \times 33 = 792$

Q16) b) $100\% - 95\% = 5\%$
 $5\% \rightarrow 48 + 42 = 90$
 $1\% \rightarrow 90 \div 5 = 18$
 $95\% \rightarrow 18 \times 95 = 1710$
Girls R $\rightarrow 1710 - 792 = 918$
Girls total $\rightarrow 42 + 918 = 960$
Boys total $\rightarrow 48 + 792 = 840$
Total $\rightarrow 960 + 840 = 1800$
G : B : Total
960 : 840 : 1800
96 : 84 : 180
8 : 7 : 15

c) decrease

Q17) $4 \times 4 \times 4 = 64$
 $64 \times 36 = 2304$ (total)

$$\sqrt{2304} = 48$$
$$48 \times 4 = 192$$

- a) 64
b) 192cm