NAN HUA PRIMARY SCHOOL
END-OF-YEAR EXAMINATION
PRIMARY 5

MATHEMATICS
PAPER 1
(BOOKLET A)

Total Time for Booklets A and B: 1 hour

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. Shade your answers in the Optical Answer Sheet (OAS) provided for Questions 1-15.
6. The use of calculators is **NOT** allowed.

Name : _____ ( )

Class : 5_____

Parent's Signature :_____

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 (OAS). (20 marks)

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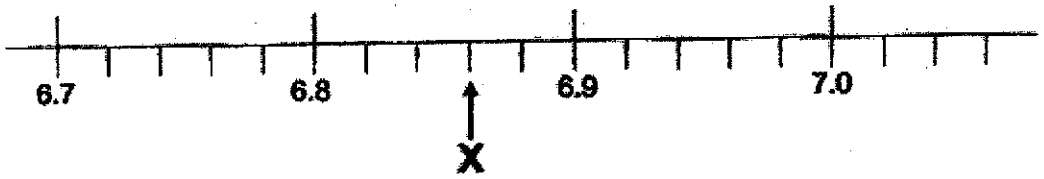
1. Arrange the following fractions from the smallest to the largest:

$$\frac{3}{2},\quad \frac{6}{5},\quad 1\frac{1}{7}$$

	Smallest		Largest
(1)	$\frac{3}{2}$,	$1\frac{1}{7}$,	$\frac{6}{5}$
(2)	$\frac{3}{2}$,	$\frac{6}{5}$,	$1\frac{1}{7}$
(3)	$\frac{6}{5}$,	$\frac{3}{2}$,	$1\frac{1}{7}$
(4)	$1\frac{1}{7}$,	$\frac{6}{5}$,	$\frac{3}{2}$

( )

2. Part of a scale is shown below. What is the value of the reading at X?



(1) 6.83
(2) 6.86
(3) 6.88
(4) 7.10

( )

3. Find the value of $40 \div 4 \times (8 - 6)$.

(1) 5
(2) 20
(3) 36
(4) 74

( )

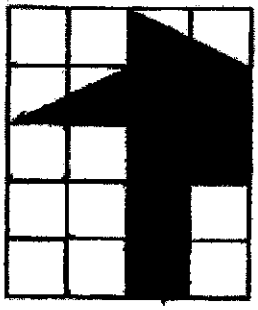
4. The diagram shows a calculator.
Which of the following could be the mass of this calculator?

(1) 1 g
(2) 10 g
(3) 100 g
(4) 1000 g ( )

5. In a school, the ratio of the number of boys to the number of girls is 5 : 9. What is the ratio of the number of girls to the total number of children in the school?

(1) 5 : 9
(2) 5 : 14
(3) 9 : 5
(4) 9 : 14 ( )

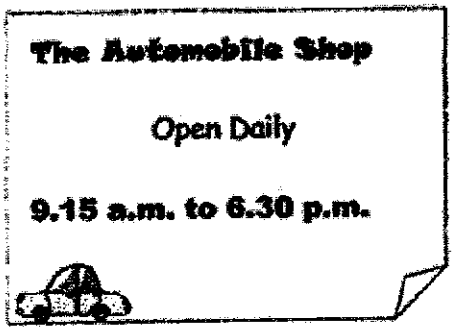
6. A picture is drawn on a square grid.



What percentage of the square grid is shaded?

(1) 8%
(2) 16%
(3) 40%
(4) 60% ( )

7. The opening hours of a shop are shown below. How long does the shop open each day?

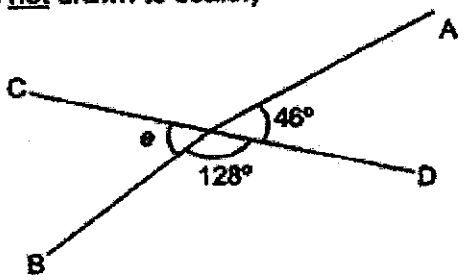


(1) 3 h 15 min
(2) 3 h 45 min
(3) 9 h 15 min
(4) 9 h 45 min ( )

8. Express $\frac{3}{8}$ as a decimal.

(1) 0.125
(2) 0.375
(3) 0.625
(4) 0.875 ( )

9. In the figure below, CD is a straight line. Find $\angle e$.
(The figure is <u>not</u> drawn to scale.)



(1) 46°
(2) 52°
(3) 58°
(4) 134° ( )

10.

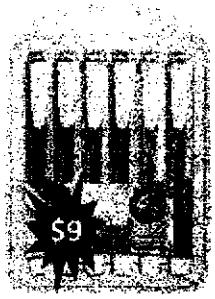
Electric scooter for Rent

First hour :	$12
Every additional $\frac{1}{2}$ hour:	$4

Miss Lim rented a scooter for 3 hours. How much did she pay?

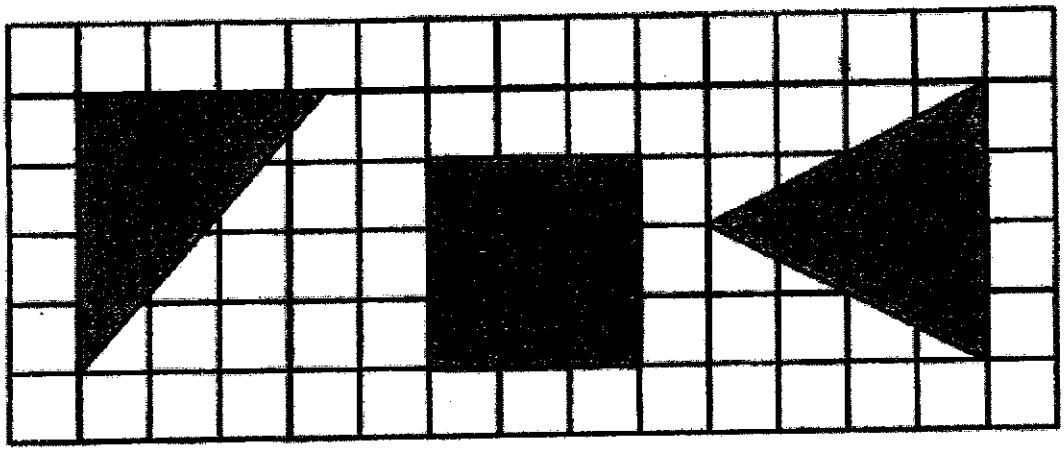
(1) $16
(2) $20
(3) $24
(4) $28 ( )

11. Highlighters are only sold in packets of 6. Each packet is sold at $9.
Mrs Tan has $50. How many highlighters can she buy at most?



(1) 30
(2) 33
(3) 35
(4) 36 ( )

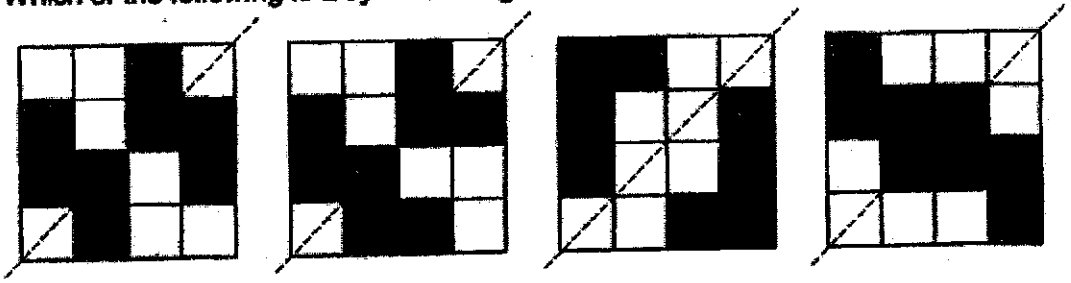
12. In the square grid below, A is a right-angled triangle, B is a square and C is another triangle. Arrange A, B and C from the largest to the smallest area.



	Largest		Smallest
(1)	A,	B,	C
(2)	A,	C,	B
(3)	B,	C,	A
(4)	C,	A,	B

( )

13. Each figure below is made up of 16 squares.
8 squares in each figure are shaded.
Which of the following is a symmetric figure?



(1) (2) (3) (4)

( )

14. The table below shows the number of students in a Primary 5 class. Some of the information is missing.

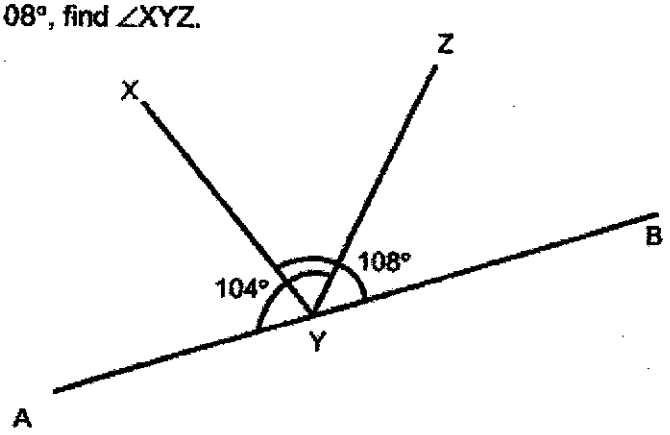
	With CCA	Without CCA	Total
Boys	10	6	
Girls	15	5	20
Total	25	11	36

Based on the given information, what is the ratio of the number of girls without CCA to the number of boys without CCA in the Primary 5 class?

(1) 5 : 6
(2) 6 : 5
(3) 5 : 11
(4) 6 : 11

( )

15. In the figure below, AYB is a straight line. Given that ∠AYZ = 104° and ∠XYB = 108°, find ∠XYZ.



(1) 76°
(2) 72°
(3) 32°
(4) 4°

( )

NAN HUA PRIMARY SCHOOL
END-OF-YEAR EXAMINATION
PRIMARY 5

MATHEMATICS
PAPER 1
(BOOKLET B)

Total Time for Booklets A and B: 1 hour

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. Write your answers in this booklet.
6. The use of calculators is **NOT** allowed.

Marks Obtained

Paper 1	**Booklet A**		**/ 45**
	Booklet B		
Paper 2			**/ 55**
Total			**/ 100**

Name : _____ ( )

Class : 5_____

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)

Do not write in this space

16. Express 1005 grams in kilograms.

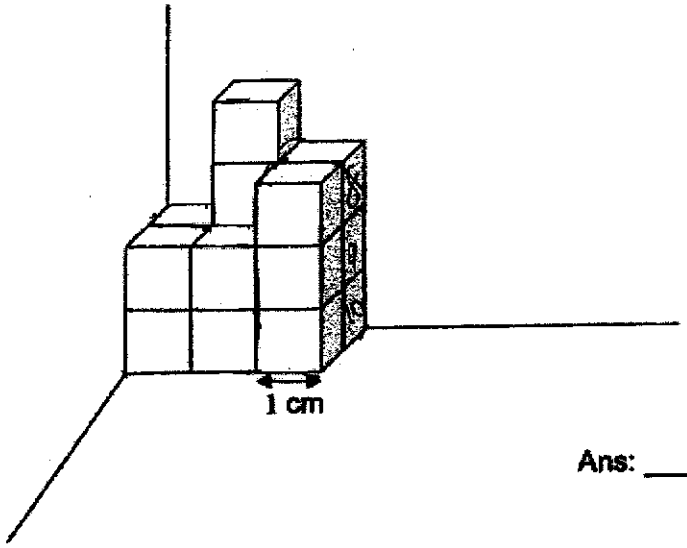
Ans: _____ kg

17. What is the missing number in the box?

$$\frac{8}{12} = \frac{\square}{9}$$

Ans: _____

18. The solid figure below is made up of unit cubes.
What is the volume of the solid figure?



Ans: _____ unit cubes

Subtotal	/ 3

19. Find the value of 2.3×200.

Do not write in this space

Ans: _____

20. The table below shows Caili's scores for 4 games she played.

Game	1	2	3	4
Score	5	0	9	10

Find the average score for the 4 games she played.

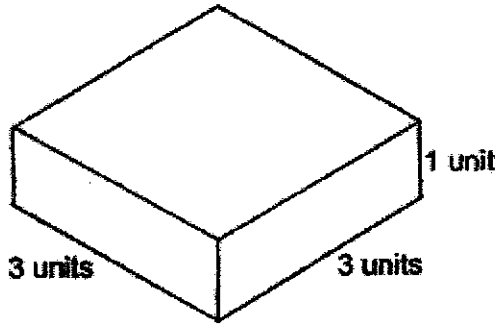
Ans: _____

Subtotal	/2

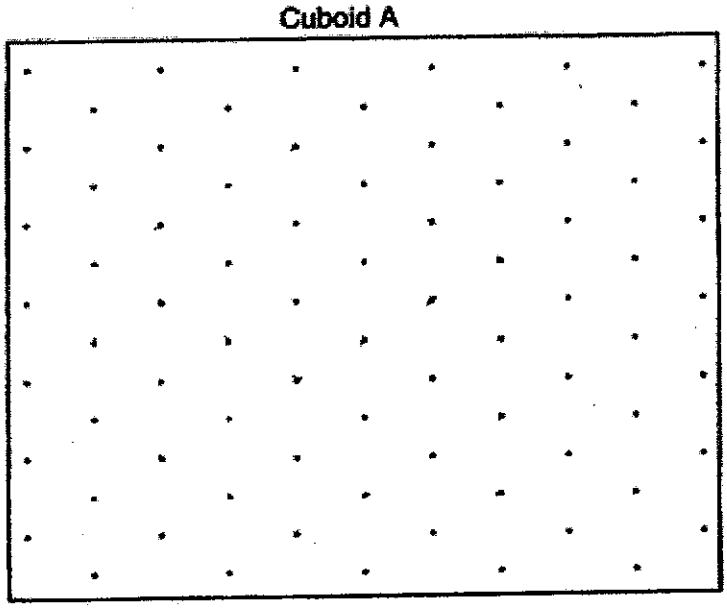
Questions **21** to **30** carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. **(20 marks)**

Do not write in this space

21. The figure below shows Cuboid A. Draw a cuboid with a volume twice that of Cuboid A on the isometric grid provided.



Cuboid A



22. Sally bought a roll of stickers with pictures as shown in the following sequence. The roll of stickers has 249 stickers. How many of her stickers have the picture of an apple, ?

Ans: _____

Subtotal	14

23. (a) Find the value of $\frac{3}{4} - \frac{2}{5}$.

Give your answer in the simplest form.

(b) Find the value of $\frac{9}{10} \times \frac{2}{3}$.

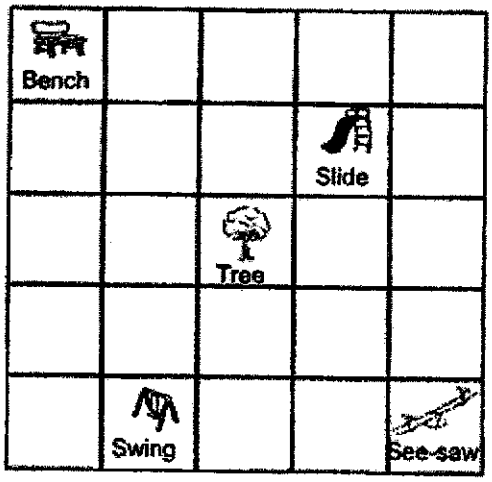
Give your answer in the simplest form.

Do not write in this space

Ans: (a) _____

(b) _____

24. The square grid below shows the plan of a playground in a school.



(a) Which object is North-East of the Tree?

(b) Which direction is the Swing from the See-saw?

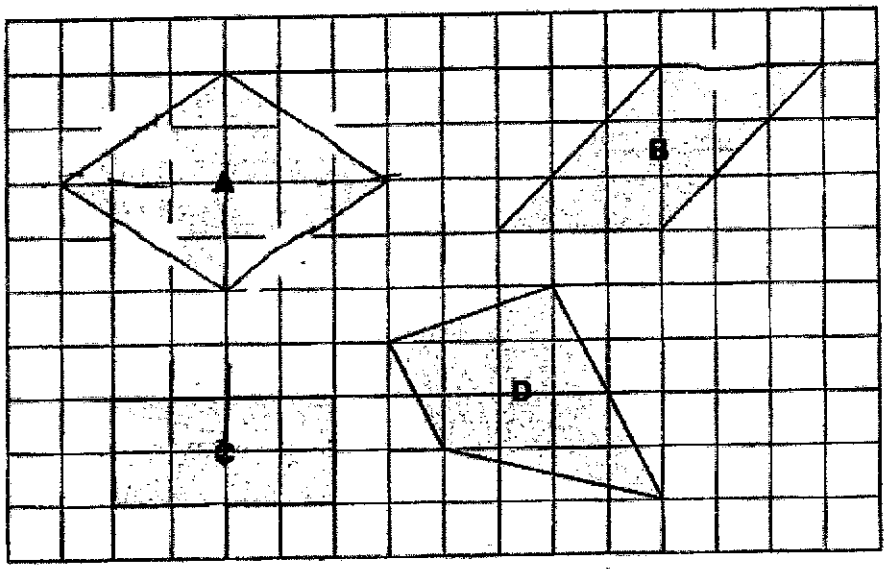
Ans: (a) _____

(b) _____

Subtotal	4 /4

Do not write in this space

25. Four figures, A, B, C and D are drawn on a square grid.



Which 2 figures have more than one line of symmetry?

Ans: Figures _____ & _____

26. (a) Express 5% as a decimal.

(b) Express 12 minutes as a percentage of 1 hour.

Ans: (a) _____

(b) _____ %

Subtotal	/ 4

27. Faith saved $240 last month. Her mother decided to give her $2 for every $10 she saved. How much did Faith's mother give her?

Do not write in this space

Ans: $_____

28. The table below shows the rate of parking charges in a carpark.

Parking Charges	
First hour	$1.30
Every subsequent 30 minutes or part thereof	$0.80

Daniel parked his car in the carpark from 3 p.m. to 5.20 p.m.
How much did he pay?

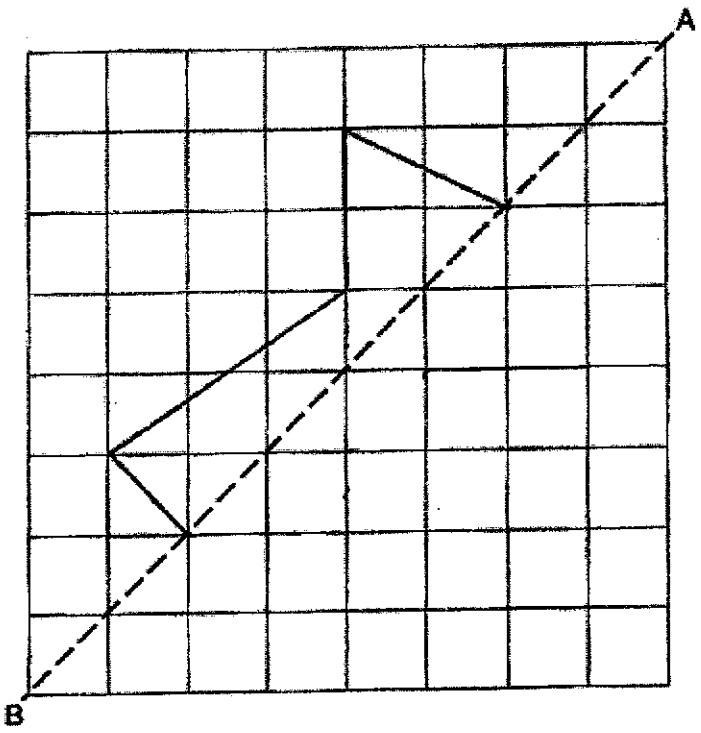
Ans: $_____

Subtotal	/ 4

Do not write

Do not write in this space

29. Complete the figure below such that line AB is the line of symmetry.



30. Some teachers and students from Glory Childcare Centre went on a field trip. There were 12 teachers in each group of 20 students.
There were 48 more students than teachers.
How many students went on the field trip?

Ans: _____

— End of Paper 1 —

Subtotal	/4

NAN HUA PRIMARY SCHOOL
END-OF-YEAR EXAMINATION
PRIMARY 5

MATHEMATICS
Paper 2

Total Time for Paper 2: 1 hour 30 minutes

INSTRUCTION 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. Write your answers in this booklet.
6. The use of an approved calculator is expected, where appropriate.

Marks Obtained

Total	Max Mark
	55

Name : _____( )

Class : 5_____

Parent's Signature :_____

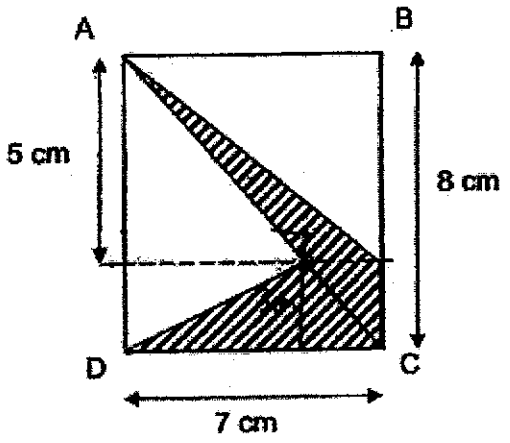
Questions 1 to 5 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

Do not write in this space

1. In an aquarium, there were 1080 goldfish and guppies. The ratio of the number of guppies to the number of goldfish was 5 : 4. How many goldfish were left after 30 goldfish were sold?

Ans: _____

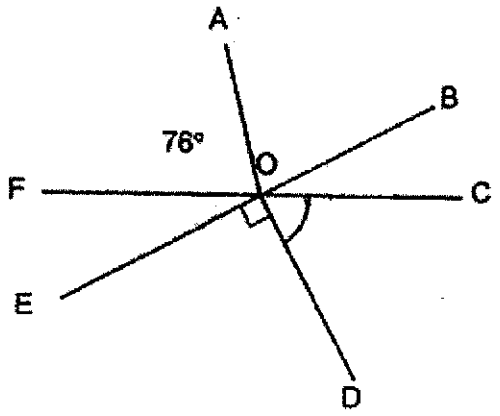
2. ABCD is a rectangle. Find the area of the shaded part.



Ans: _____ cm^2

Subtotal	/4

3. In the figure below, not drawn to scale, BE and CF are straight lines. $\angle AOF = \angle AOB$. Find $\angle COD$.



Ans: _____°

Do not write in this space

4. Glenda bought some flowers for her teachers on Teachers' Day. If she gave each teacher 4 flowers, there were 3 flowers left over. If she gave each teacher 6 flowers, she would be short of 1 flower. What was the smallest possible number of flowers that Glenda had?

Ans: _____

Subtotal	/4

Do not write in this space

5. Mr Faizal cycles $7\frac{2}{5}$ km at a nearby park connector every weekend. His wife cycles 4 km less than him. What is the total distance that both of them cover together?

Ans: _____km

Subtotal	/ 2

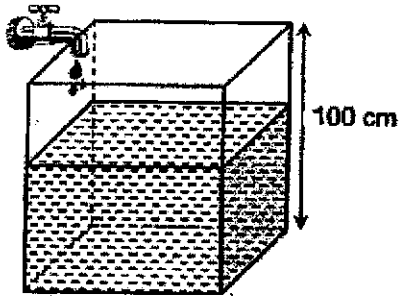
For questions **6** to **17**, show your working clearly and write your answers in the spaces provided. The number of marks available is shown in brackets [ ] at the end of each question or part-question. (45 marks)

Do not write in this space

6. The figure below shows a cubical tank which is $\frac{3}{5}$-filled with water.

(a) What is the volume of water needed to fill up the tank to the brim?

(b) Water is added to the tank at a rate of 4 litres per minute. At this rate, how long will it take to fill the tank completely?



Ans: (a)_____ [2]

(b)_____ [1]

Subtotal	/3

Do not write in this space

7. The usual price of a toaster was $260. During a sale, a discount of 10% was given.

(a) How much was the discounted price?

(b) Mr Tan bought the toaster during the sale. However, he also had to pay a GST of 7% on the discounted price. How much did he pay for the toaster?

Ans: (a)_____ [1]

(b)_____ [2]

8. The table below shows the charges for water usage.

Volume of water	Charge
First 40 m^3	$1.17 per m^3
Above 40 m^3	$1.40 per m^3

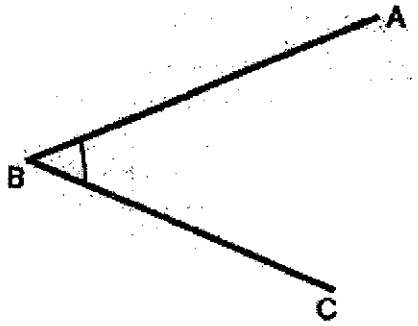
Mrs Lee's family used 68 m^3 of water in September. How much did her family pay for the water used?

Ans: _____ [3]

Subtotal	/ 6

9. (a) In the space below, AB and BC are straight lines. Measure ∠ABC.

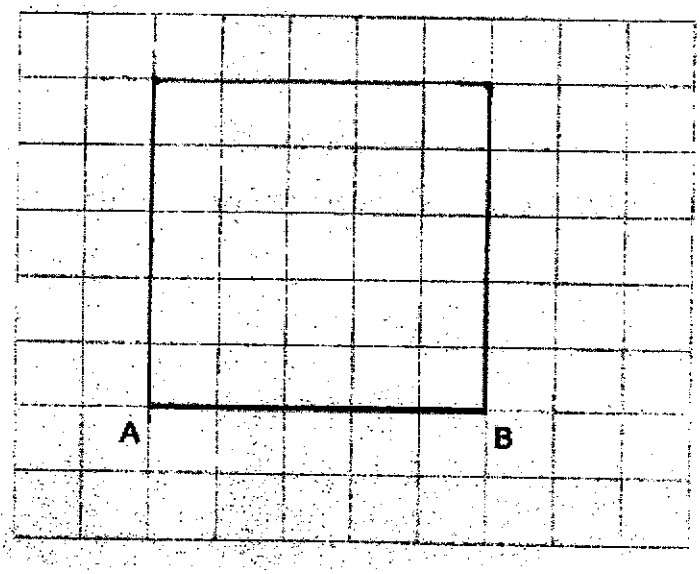
Do not write in this space



Ans: (a) _____ [1]

(b) On the square grid below, AB is a straight line. Draw a square ABCD.

[2]



Subtotal	/3

Do not write in this space

10. The average mass of 3 children, Xavier, Jeremy and Zen, is 54 kg. Xavier is 60 kg. Jeremy and Zen are of the same mass. How heavy is Zen?

Ans: _____ [3]

11. Alex had twice as many marbles as Benjamin at first. Alex then gave away 33 marbles to another friend. Alex now has 16 more marbles than Benjamin.

(a) How many marbles does Alex have now?
(b) How many marbles did Alex and Benjamin have at first?

Ans: (a)_____ [2]

(b)_____ [2]

Subtotal	/ 7

12. Jimmy started saving part of his pocket money by putting 2 coins in a money box every day. Each coin was either a 20¢ or 50¢ coin. His mother also put in a $1 coin in the box every 7 days. The total value of the coins after 98 days was $82.30.

(a) How many coins were there altogether?
(b) How many of the coins were 50¢ coins?

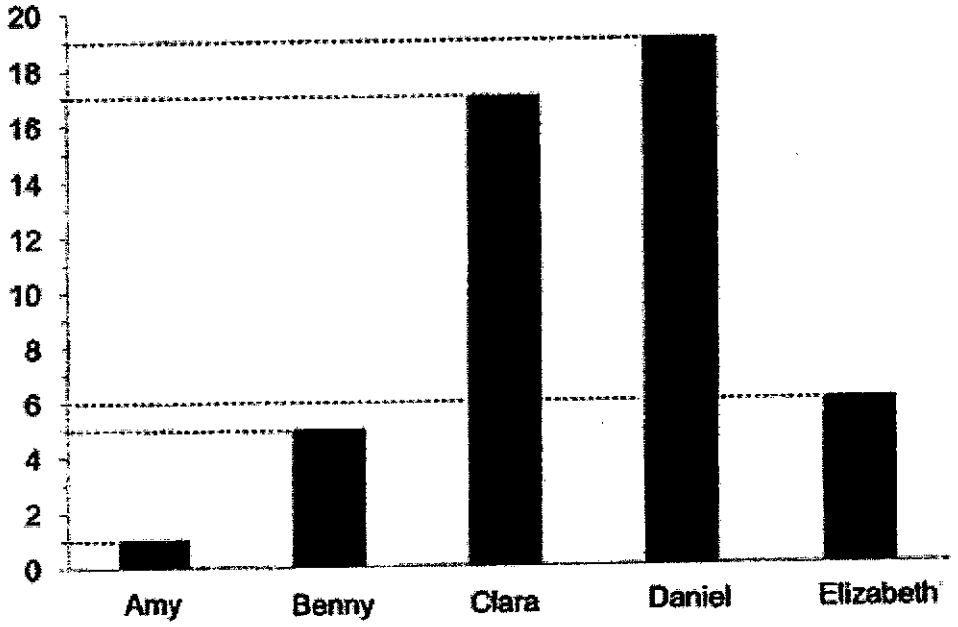
Do not write in this space

Ans: (a)_____ [2]

(b)_____ [2]

13. The graph below shows the number of stickers bought by 5 children.

Do not write in this space



(a) What is the total number of stickers bought by the 5 children?

(b) What percentage of all the stickers are bought by Elizabeth?

Ans: (a)_____ [2]

(b)_____ [2]

14. Auntie Lucy baked 128 pies and some cookies.
She gave away $\frac{3}{8}$ of her pies and $\frac{2}{7}$ of her cookies. She had 155 cookies left.

Do not write in this space

(a) How many pies did she give away?

(b) How many cookies did she give away?

Ans: (a)_____ [2]

(b)_____ [2]

15. Figure A shows a rectangular piece of paper 32 cm by 5 cm which is coloured on one side. It is folded along the dotted line to form Figure B.

(a) Find the area of the rectangular piece of paper.

(b) Find the total area of X, Y and Z in Figure B.

Do not write in this space

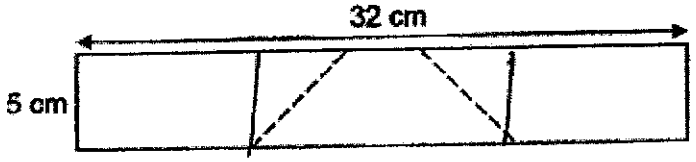


Figure A

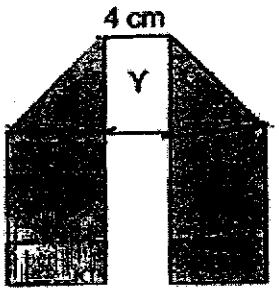


Figure B

Ans: (a)_____ [1]

(b)_____ [3]

16. The first four figures of a pattern are shown below.

Do not write in this space

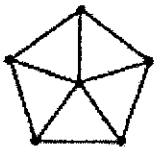


Figure 1

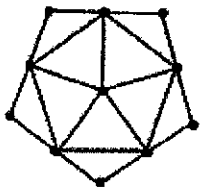


Figure 2

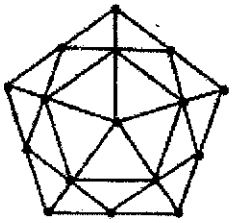
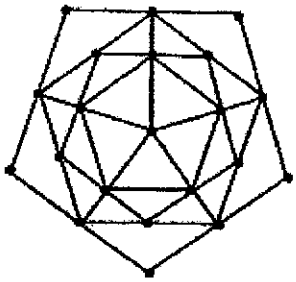


Figure 3



...

Figure 4

The table shows the number of dots and the number of non-overlapping triangles for each figure.

Figure number	Number of dots	Number of non-overlapping triangles
1	6	5
2	11	10
3	16	20
4	21	25
5	(i)_____	(ii)_____

(a) Fil in the table for Figure 5.
(b) What is the number of dots in Figure 10?
(c) In which Figure number will there be 106 dots?

Ans: (a) (i)_____ [1]

(ii)_____ [1]

(b)_____ [1]

(c)_____ [2]

17. There were 38 pupils in a class. Each of them contributed $10 towards a charity drive. The form teacher contributed $70.

$\frac{2}{5}$ of the total amount contributed was spent on buying food items.

$\frac{1}{9}$ of the remainder was spent on stationery.

After spending some money on toiletries, there was $93 left.

(a) What was the total amount contributed?

(b) How much was spent on toiletries?

Do not write in this space

Ans: (a)_____ [2]

(b)_____ [3]

— End of Paper 2 —

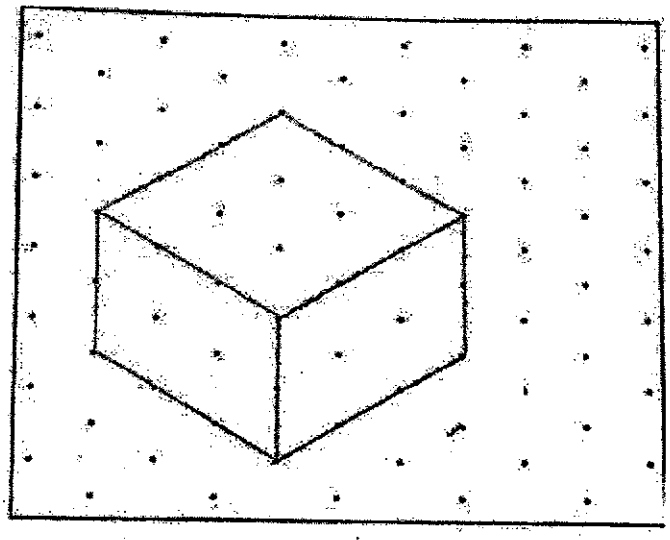
SCHOOL : NAN HUA PRIMARY SCHOOL
LEVEL : PRIMARY 5
SUBJECT : MATH
TERM : EOY

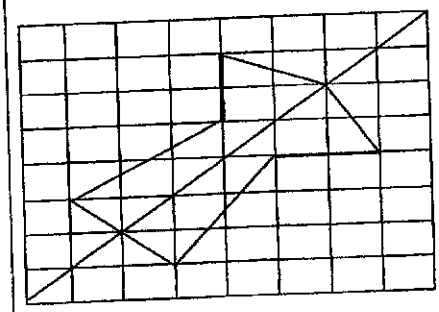
PAPER 1 BOOKLET A

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

Q 11	Q12	Q13	Q14	Q15
1	3	2	1	3

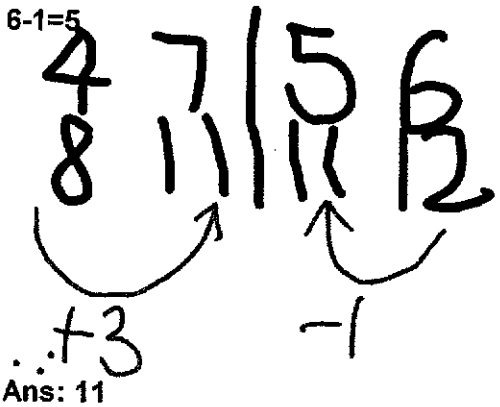
PAPER 1 BOOKLET B

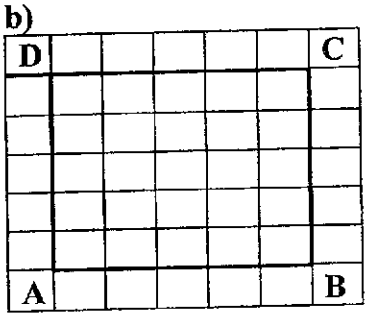
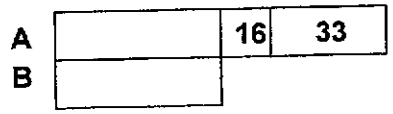
Q16)	1.005kg
Q17)	6
Q18)	16
Q19)	460
Q20)	6
Q21)	
Q22)	249÷5=49R4

	49+1=50 Ans:50
Q23)	a) 7/20 b) 3/5
Q24)	a) Slide b) West
Q25)	A&C
Q26)	a) 0.05 b) 20%
Q27)	240÷10=24 24x2=48 Ans: $48
Q28)	0.8x2=1.6 1.3+1.6=2.9 2.9+0.8=3.7 Ans: $3.70
Q29)	
Q30)	20-12=8 48÷8=6 6x20=120 Ans:120 students

PAPER 2

Q1)	guppies:goldfish 5:4 Total→ 9u 1u→ 1080÷9=120 4u → 120x4=480 480-30=450 Ans: 450 goldfish
Q2)	8-5=3 1/2x3x3=10.5 1/2x3x3=10.5 10.5x2=21 Ans: 21cm

Q3)	76+76=152 180-152=28 152+28+28+90=298 360-298=62 Ans:62°
Q4)	4+3=7 6-1=5  Ans: 11
Q5)	$7\frac{2}{5} - 4 = 3\frac{2}{5}$ $7\frac{2}{5} + 3\frac{2}{5} = 10\frac{4}{5}$ Ans: $10\frac{4}{5}$km
Q6)	a) $1 - \frac{3}{5} = \frac{2}{5}$ $100 \times \frac{2}{5} = 40$ 100 x 100 x 40 = 400000 400000mℓ of water is needed to fill up the tank. b) 400000 ÷ 4000 = 100 It will take 100 minutes for the tank to be filled completely.
Q7)	a) 100% → 260 10% → 260 ÷ 10 = 26 200 – 26 = 324 The discounted price was $234. b) 100% → 234 7% → 234 ÷ 100 x 7 = 16.38 234 + 16.38 = 250.38

	He paid $250.38 for the toaster.
Q8)	66 – 40 = 26 1.17 x 40 = 46.80 1.4 x 26 = 36.40 46.80 + 36.40 = $83.20
Q9)	a) 45^{o} b) 
Q10)	54 x 3 = 162 162 – 60 = 102 102 ÷ 2 = 51 Zen is 51kg
Q11)	 a) 33 + 16 = 49 49 + 16 = 65 Alex has 49 marbles. b) 49 x 3 = 147 They have 147 marbles at first.
Q12)	a) No. of 1 dollar coins = 98 ÷ 7 = 14 No. of 20¢ and 50¢ = 98 x 2 = 196 196 + 14 = 210. There were 210 coins.

b)
Value of 20¢ and 50¢ = 82.30 – 14
= 68.30

20¢	Cost	50¢	Cost	Total	√/ X
98	98 x 0.20 = 19.6	98	98 x 0.50 = 49	19.6 + 49 = 68.60	X
99	99 x 0.20 = 19.8	97	99 x 0.50 = 48.5	19.8 + 48.5 = 68.30	✓

97 of the coins were 50¢ coins.

Q13)

a)
1 + 5 + 17 + 19 + 6 = 48
The total number is 48.

b)
100% → 48
1% → 48 ÷ 100
= 0.48
6 ÷ 0.48 = 12.5%
12.5% are bought by Elizabeth.

Q14)

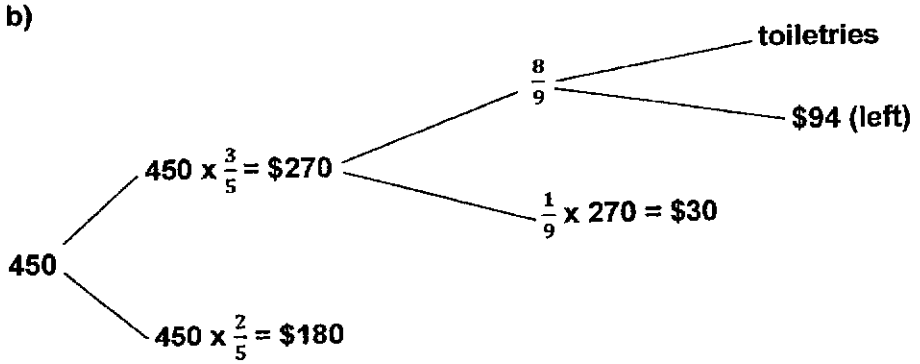
a)
8U → 128
1U → 128 ÷ 8
= 16
3U → 16 x 3
= 48
She gave away 48 pies.

b)
5U → 155
1U → 155 ÷ 5
= 31
2U → 31 x 2
= 62
She gave away 62 cookies.

Q15)

a)
32 x 5 = 160
The area is 160cm^2

b)
32 – 4 = 28
9 x 5 = 45
45 x 2 = 90
$\frac{1}{2}$ x 5 x 5 = 12.5

	12.5 x 2 = 25 25 + 90 = 115 4 x 5 = 20 20 + 115 = 135 The total area is 135cm^2.
Q16)	a) i) 21 + 5 = 26 ii) 25 + 10 = 35 b) 10 – 1 = 9 9 x 5 = 45 45 + 6 = 51 c) 106 – 6 = 100 100 ÷ 5 = 20 20 + 1 = 21
Q17)	a) 38 x 10 = 380 380 + 70 = \$450 b)  180 + 30 = 210 450 – 210 = 240 240 – 93 = \$147