



NANYANG PRIMARY SCHOOL

FIRST SEMESTRAL EXAMINATION
2017

PRIMARY 5
MATHEMATICS

PAPER 1

DURATION: 1 HOUR

Booklet A	/ 20
Booklet B	/ 25

Paper 1 Total: / 45

Name: _____ ()

Class: Primary 5 ()

Date: 3 May 2017

Any query on marks awarded should be raised by 18 May 2017. We seek your understanding in this matter as any delay in the confirmation of marks will lead to delays in the generation of results.

Parent's Signature: _____

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
FOLLOW ALL INSTRUCTIONS CAREFULLY.
ANSWER ALL QUESTIONS.

YOU ARE **NOT** ALLOWED TO USE A CALCULATOR.

PAPER 1 (BOOKLET A)

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 oval (1, 2, 3 or 4) on the Optical Answer Sheet.

(20 marks)

1 Find the value of $24 - 3 \times (12 - 8) + 8 \div 2$.

(1) 10

(2) 16

(3) 46

(4) 88

2 Which one of the following numbers has the digit '3' in the ten thousands place?

(1) 895 321

(2) 859 231

(3) 853 921

(4) 835 921

3 Express $3\frac{78}{125}$ as a decimal.

(1) 3.125

(2) 3.312

(3) 3.624

(4) 3.78

4 Find the value of $73.2 \div 30$.

(1) 0.244

(2) 2.44

(3) 24.4

(4) 244

5 Express 9 kg 580 g in kilograms.

(1) 9.058 kg

(2) 9.58 kg

(3) 95.08 kg

(4) 95.8 kg

6 Express $70 + 3 + \frac{83}{1000}$ as a decimal.

(1) 70.380

(2) 70.383

(3) 73.083

(4) 73.830

7 Express 6.006 as a mixed number in its simplest form.

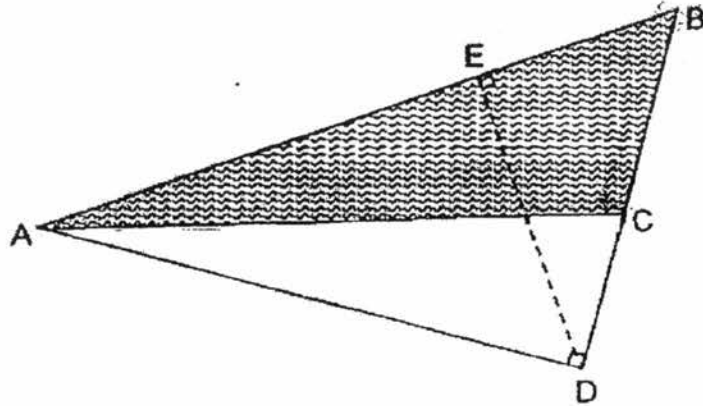
(1) $6\frac{3}{5}$

(2) $6\frac{3}{50}$

(3) $6\frac{3}{500}$

(4) $6\frac{6}{1000}$

- 8 In the figure below, triangle ABD is made up of triangle ABC and triangle ACD.



Given that BC is the base of triangle ABC, what is the height of triangle ABC?

- (1) AB
- (2) AD
- (3) CD
- (4) ED

9 Look at the table below.

Triangle	Base	Height
A	12 cm	12 cm
B	8 cm	6 cm
C	8 cm	4 cm
D	6 cm	4 cm

Which triangle has the area of 24 cm^2 ?

- (1) A
- (2) B
- (3) C
- (4) D

10 Express 9000 cm^3 in ml.

- (1) 9 ml
- (2) 90 ml
- (3) 900 ml
- (4) 9000 ml

11 Find the product of 23 and 700.

- (1) 161
- (2) 1610
- (3) 16 100
- (4) 161 000

12 Rina had 3 packets of sweets. Each packet contained 12 sweets. She gave all her sweets equally to 4 friends. How many sweets did each friend receive?

- (1) 9
- (2) 12
- (3) 13
- (4) 36

13 Brian scored 75 marks in a Mathematics test. Tom's score for the test was $\frac{3}{5}$ of Brian's score. How many marks did Tom score for the Mathematics test?

(1) 15

(2) 30

(3) 45

(4) 60

14 A durian cost \$25.45. The durian cost \$21.30 more than a pineapple. Vicky paid for 1 pineapple and 1 durian with a fifty-dollar note. How much change did she receive?

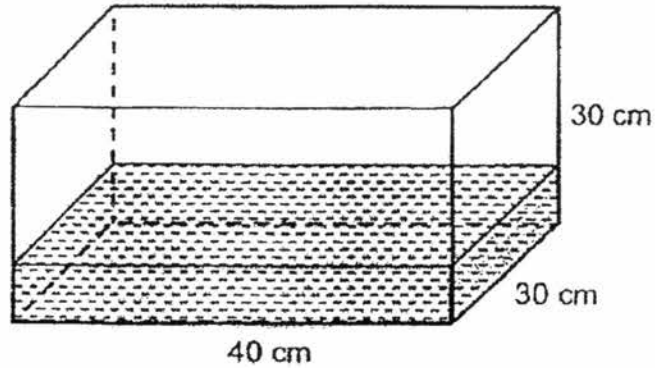
(1) \$4.15

(2) \$20.40

(3) \$29.60

(4) \$46.75

- 15 At first, a rectangular tank measuring 40 cm by 30 cm by 30 cm contained some water as shown below.



After Melvin poured 2400 ml of water into the tank, the tank became $\frac{2}{3}$ -filled with water. How much water was there in the tank at first?

- (1) 21 600 cm³
- (2) 24 000 cm³
- (3) 26 400 cm³
- (4) 36 000 cm³

Name: _____ () Class: Pr 5 ()

PAPER 1 (BOOKLET B)

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 Write eight million, seven hundred and two thousand and ninety-two in numerals.

Ans: _____

17 Find the value of $27 \div (9 - 3 \times 2) + 4$.

Ans: _____

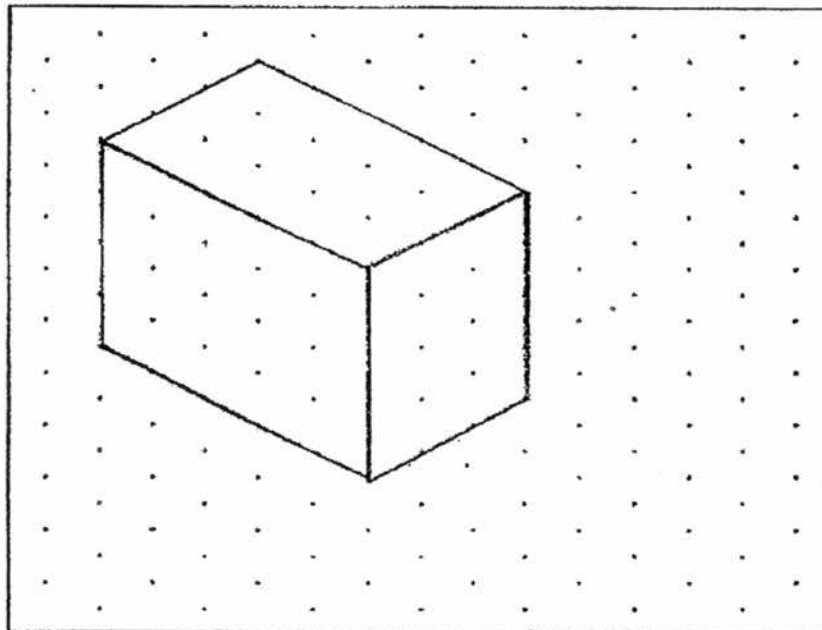
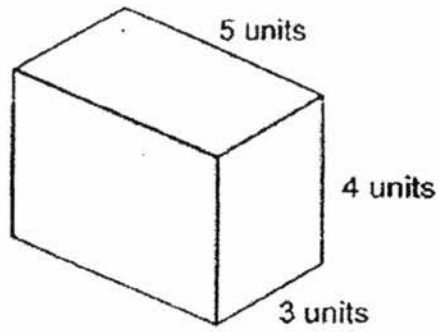
18 Round 285 695 to the nearest hundred.

Ans: _____

19 Find the value of $56.63 \div 7$.

Ans: _____

20 Draw the solid shown below on the given isometric grid.



Questions 21 to 30 carry 2 marks each. Show your working clearly in the space provided for each question 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, Ismail had a total of 167 stamps from Singapore and Malaysia. After his father gave him 183 stamps from Singapore, the number of stamps from Singapore was 9 times the number of stamps from Malaysia. How many stamps from Malaysia did he have at first?

Ans: _____

- 22 Five identical pizzas were shared equally among 45 children. What fraction of a pizza did each child get? Give your answer as a fraction in the simplest form.

Ans: _____

- 23 Ahmad spent $\frac{7}{12}$ of his salary on food and spent $\frac{3}{10}$ of the remaining salary on transport. What fraction of his salary did he spend on transport? Give your answer as a fraction in the simplest form.

Ans: _____

- 24 A container was filled with 9.6 litres of syrup. All the syrup from the container was poured into 300 small bottles. Each bottle contained an equal amount of syrup. What was the amount of syrup in each small bottle?

Ans: _____

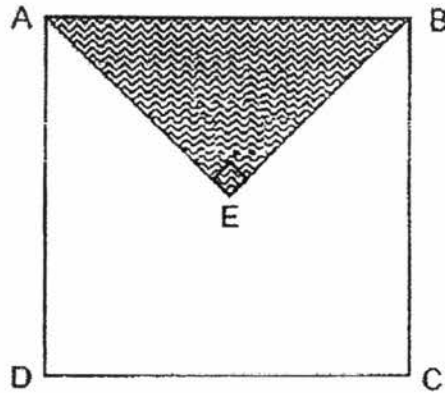
- 25 Bernice had 6.4 kg of flour and used 1.39 kg of it to bake some cakes. How much of the flour was left? Give your answer in grams.

Ans: _____ g.

- 26 The total cost of 2 identical shirts and 3 identical blouses is \$124.55. The total cost 3 such shirts and 2 such blouses is \$96.45. What is the total cost of 1 such shirt and 1 such blouse?

Ans: \$ _____

- 27 In the figure below, ABE is a triangle and ABCD is a square.



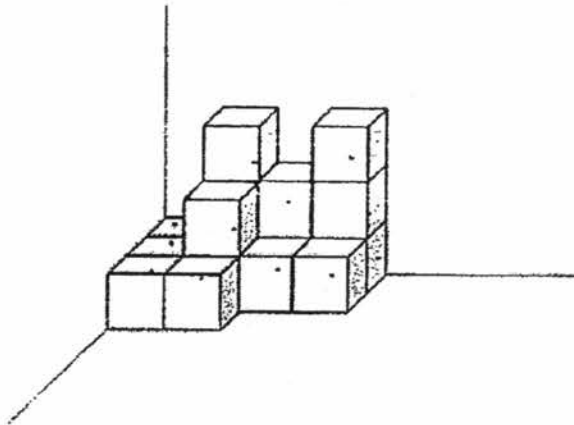
Given that the area of triangle ABE is 16 cm^2 and point E is the centre of the square, find the length of BC.

Ans: _____ cm

- 28 Find the volume of a cuboid measuring 100 cm by 40 cm by 70 cm.

Ans: _____ cm^3

- 29 The solid below was built using unit cubes.



How many unit cubes was used to build the solid?

Ans: _____

- 30 Wei Sheng used 18 litres of water to fill an empty tank to $\frac{1}{5}$ of its height.
How many more litres of water does he need to fill the tank to the brim?

Ans: _____



NANYANG PRIMARY SCHOOL

FIRST SEMESTRAL EXAMINATION
2017

PRIMARY 5
MATHEMATICS
PAPER 2

DURATION: 1 HOUR 30 MINUTES

Paper 2 Total	/ 55
GRAND TOTAL	/ 100

Name: _____ ()

Class: Primary 5 ()

Date: 3 May 2017

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PAPER 2

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

(10 marks)

-
- 1 The number of pupils in the soccer club was 4 times as many as the number of pupils in the golf club. After an equal number of pupils joined each club, there were 30 pupils in the golf club. The number of pupils in the soccer club also became twice the number of pupils in the golf club. How many pupils joined the golf club?

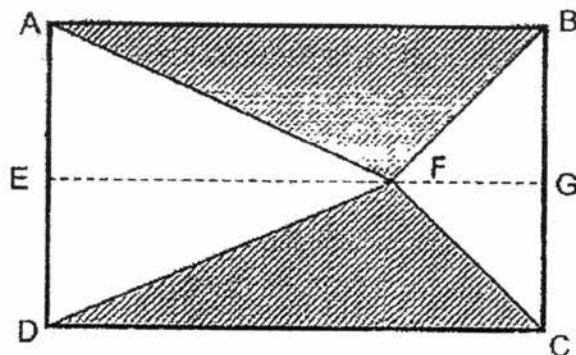
Ans: _____

-
- 2 Phoebe drank $6\frac{3}{8}$ litres of water. Claire drank $4\frac{5}{6}$ litres of water.

How many litres of water did both girls drink altogether? Give your answer as a mixed number in the simplest form.

Ans: _____ l

- 3 The rectangle below is made up of triangles ABF, BCF, CDF and ADF. The length of the DC is 98 cm and the length of BC is 54 cm.



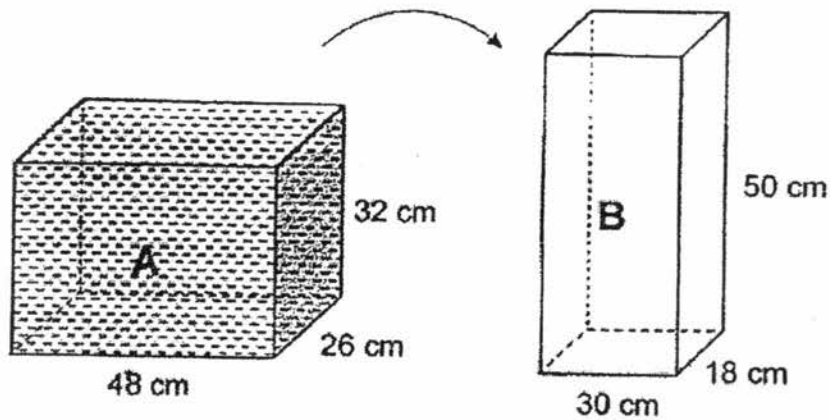
Given that $AE = ED = BG = GC$, find the total area of the shaded parts.

Ans: _____ cm^2

- 4 Find the difference in the volume between a 9-cm cube and a 7-cm cube.

Ans: _____ cm^3

- 5 Tank A, measuring 48 cm by 26 cm by 32 cm was completely filled with water at first. Leena poured some water from tank A into an empty tank B and filled tank B to the brim.



Find the volume of water left in tank A.

Ans: _____ cm^3

For questions 6 to 17, show your working clearly in the space provided for each question 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 breadth of a rectangle is $\frac{9}{5}$ m. Its length is $\frac{2}{3}$ m longer than its breadth.

- (a) What is the length of the rectangle? Give your answer as an improper fraction.
- (b) What is the area of the rectangle? Give your answer as a mixed number in the simplest form.

Ans: (a) _____ [1]

(b) _____ [2]

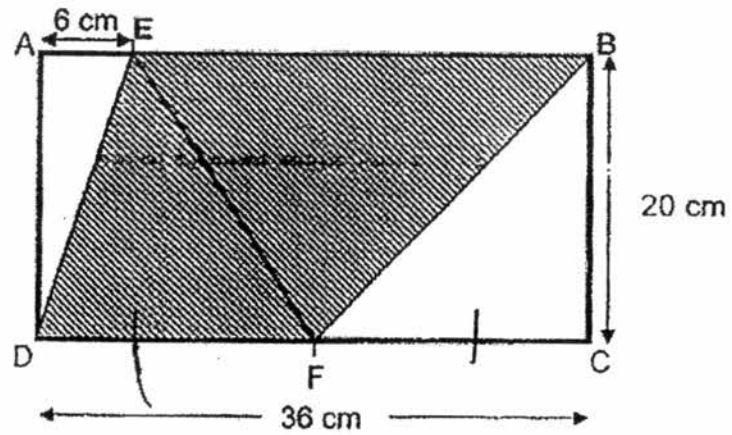
- 7 A tailor used $2\frac{3}{8}$ m of cloth to make each blouse and used twice as much cloth to make each dress. How much cloth did the tailor use to make 3 blouses and 2 dresses? Give your answer as a mixed number in its simplest form.

Ans: _____ [3]

- 8 Mr Vik bought some bottles of water at \$0.90 each and 12 bottles of fruit juice at \$2.30 each. His sister bought the same number of bottles of water as him but at \$0.50 each. She also bought 12 bottles of fruit juice at \$3 each. They spent the same amount of money. How many bottles of water did Mr Vik buy?

Ans: _____ [3]

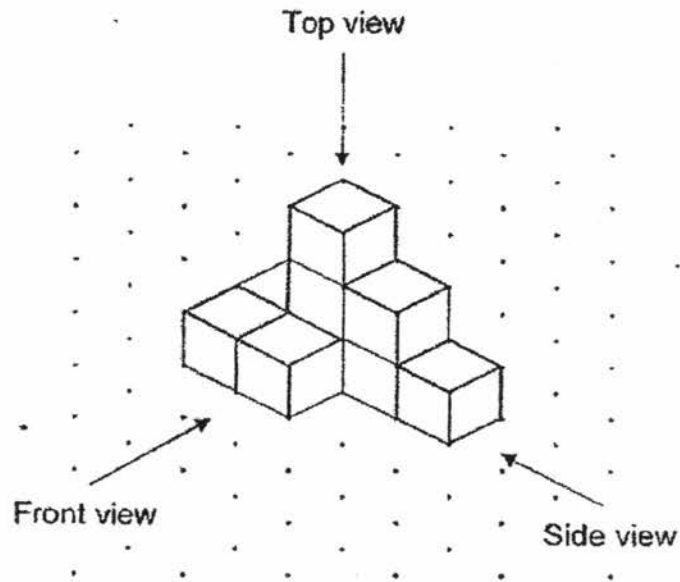
- 9 In the figure below, the rectangle ABCD is made up of 4 triangles, AED, DEF, EFB and BFC.



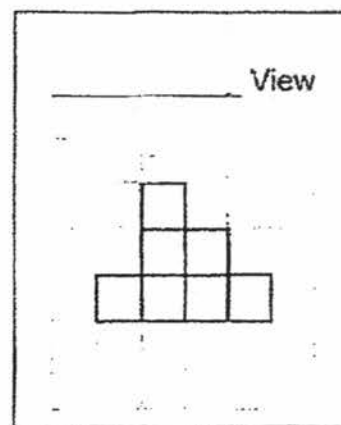
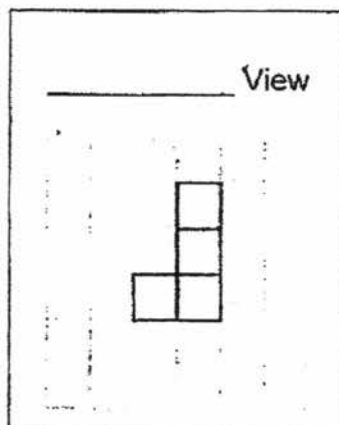
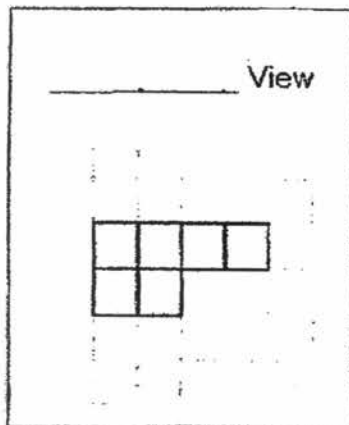
Given that $DF = FC$, find the shaded area.

Ans: _____ [3]

10 The solid below is built with unit cubes.



The front view, top view and side view of the solid are drawn in the square grid below. Fill in the blanks with Front, Top or Side.



[3]

- 11 Angela has 3 times as many stickers as Susan at first. Angela then gave 60 stickers to Susan and bought another 18 stickers. Susan bought some stickers for herself after receiving stickers from Angela. Susan then had twice as many stickers as Angela. Susan had 288 stickers in the end. How many stickers did Susan buy ?

Ans: _____ [4]

- 12 Mr Tay had fewer than 14 packets of chocolates. Each packet contained 15 pieces of chocolates. He gave away a few packets to his friends before giving an equal number of pieces of chocolates to each of his 38 pupils. He had 6 pieces of chocolates left for himself. What was the greatest number of packets of chocolates he gave to his friends?

Ans: _____ [4]

- 13 . In a library $\frac{3}{5}$ of the books were English books and $\frac{3}{8}$ of the remaining books were Chinese books. The rest were Malay books. There were 133 more English books than Malay books in the library. How many books were there in the library altogether?

Ans: _____ [4]

- 14 After Raju spent $\frac{5}{8}$ of his money, Mohan spent $\frac{4}{7}$ of his money and Thomas spent \$240, each of them had the same amount of money left. Raju had \$550 more than Mohan at first.

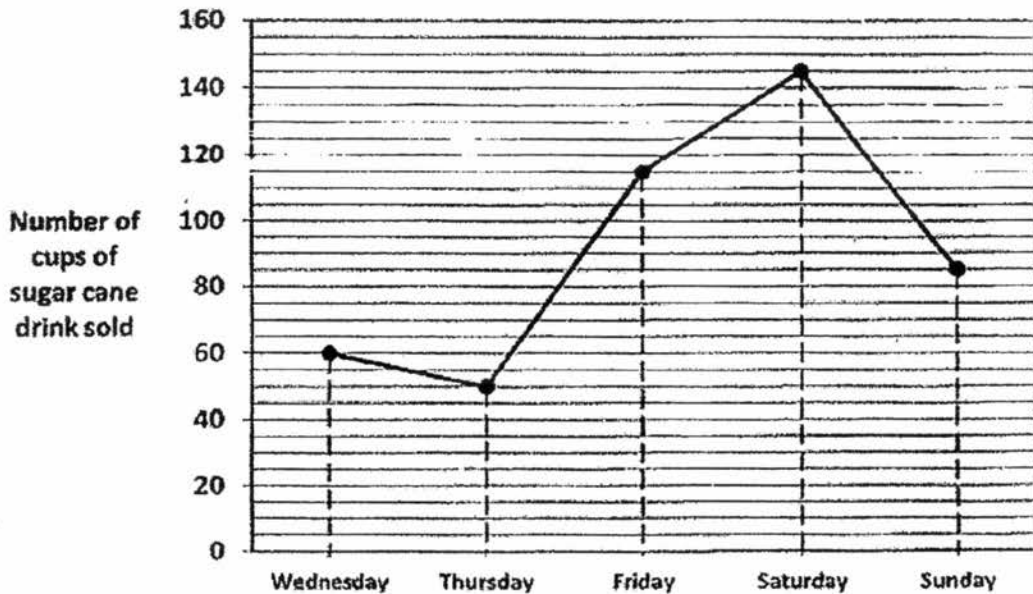
(a) How much money did Raju have at first?

(b) How much money did the 3 of them have at first?

Ans: (a) _____ [2]

(b) _____ [2]

- 15 The line graph below shows the number of cups of sugar cane drink sold each day by Mr Tan from Wednesday to Sunday.



- (a) Mr Tan sold his drink at \$1.50 each from Monday to Friday. How much money did he collect from the sale of the drink on Wednesday and Thursday in all?
- (b) Mr Tan sold his drink at \$2 each on Saturday and Sunday. How much more money did he collect from the sale of the drink on Saturday than on Sunday?

Ans: (a) _____ [2]

(b) _____ [2]

16 The total cost of 8 identical thumbdrives and 6 identical pairs of earphones was \$460. The total cost of 2 such thumbdrives and 3 such pairs of earphones was \$154.

(a) How much did a pair of earphone cost?

(b) Osman had \$100. At most, how many of such pairs of earphones could he buy with \$100?

Ans: (a) _____ [3]

(b) _____ [2]

- 17 Willy, Xavier, Yannis and Zachary shared \$690. Yannis received $\frac{1}{5}$ of the money. Willy received $\frac{1}{5}$ of the total money received by Xavier and Zachary. Xavier received $\frac{9}{11}$ as much money as Zachary.

- (a) How much money did Willy receive?
(b) How much less money did Yannis receive than Xavier?

Ans: (a) _____ [2]

(b) _____ [3]

END OF PAPER

SCHOOL : NANYANG PRIMARY SCHOOL
LEVEL : PRIMARY 5
SUBJECT : MATH
TERM : SA1

PAPER 1 BOOKLET A

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

Q 11	Q12	Q13	Q14	Q15
3	1	3	2	1

PAPER 1 BOOKLET B

Q16) 8 702 092
Q17) 13
Q18) 285 700
Q19) 8.09
Q20) -
Q21) $10U \rightarrow 167 + 183 = 350$ $1 U \rightarrow 350 \div 10 = 35$
Q22) $5 \div 45 = 5/45$ $= 1/9$
Q23) $1 - 7/12 = 5/12$ $3/10 \times 5/12 = 1/8$
Q24) $9.6 \div 300$ $= 9.6 \div 100 \div 3$ $= 0.096 \div 3 = 0.032$
Q25) $6.4 - 1.39 = 5.01$ $5.01 \times 1000 = 5010$
Q26) $2S + 3B \rightarrow \$124.55$

$$3S + 2B \rightarrow \$96.45$$

$$6S + 9B \rightarrow \$373.65$$

$$6S + 4B \rightarrow \$192.90$$

$$5B \rightarrow \$373.65 - \$192.90 = \$180.75$$

$$1B \rightarrow \$180.75 \div 5 = \$36.15$$

$$2B \rightarrow \$72.30$$

$$3S \rightarrow \$96.45 - \$72.30 = \$24.15$$

$$1S \rightarrow \$24.15 \div 3 = \$8.05$$

$$1B + 1S \rightarrow \$36.15 + \$8.05 = \$44.20$$

Q27) $16 \times 4 = 64$

$$64 \div 8 = 8$$

Q28) $100 \times 40 \times 70 \rightarrow 280\,000$

Q29) Total = $10 + 4 + 2 = 16$

Q30) $5 - 1 = 4$

$$18 \times 4 = 72$$

PAPER 2

Q1) $\frac{1}{2}$ of the soccer $\rightarrow 3U$ (golf)

$$3U \rightarrow 30$$

$$1U \rightarrow 10$$

$$2U \rightarrow 20$$

Q2) $6\frac{3}{8} + 4\frac{5}{6} = 11\frac{5}{24}$

Q3) $BG \rightarrow 54 \div 2 = 27$

$$\text{Half of rect ABEG} \rightarrow \frac{1}{2} \times 98 \times 27 = 1323$$

$$2.5 \text{ of rect ABEG} \rightarrow 1323 \times 2 = 2646$$

4) $9 \times 9 \times 9 = 729$

$$7 \times 7 \times 7 = 343$$

$$729 - 343 = 386$$

Q5) Vol. of A $\rightarrow 32 \times 26 \times 48 = 39936$

$$\text{Vol. of B} \rightarrow 50 \times 18 \times 30 = 27000$$

$$\text{Difference} \rightarrow 39936 - 27000 = 12936$$

Q6) a) $\frac{9}{5} + \frac{2}{3} = \frac{37}{15}$

$$\text{Ans: } \frac{37}{15} \text{ m}$$

b) $\frac{9}{5} \times \frac{37}{15} = 4\frac{11}{25}$

$$\text{Ans: } 4\frac{11}{25} \text{ m}^2$$

Q7) $1B \rightarrow 1U$

$1D \rightarrow 2U$

$3B \rightarrow 3U$

$2D \rightarrow 4U$

$2\frac{3}{8} \times 3 = 7\frac{1}{8}$

$4\frac{3}{4} \times 2 = 9\frac{1}{2}$

$7\frac{1}{8} + 9\frac{1}{2} = 16\frac{5}{8}$

Ans : $16\frac{5}{8} m$

Q8) $12 \times \$2.30 = \27.60

$12 \times \$3 = \36

$\$0.90 - \$0.50 = \$0.40$

$\$36 - \$27.60 = \$8.40$

$\$8.40 \div \$0.40 = 21$

Q9) $EB \rightarrow 36 \text{ cm} - 6 \text{ cm} = 30 \text{ cm}$

Area of Triangle EBF $\rightarrow \frac{1}{2} \times 30 \text{ cm} \times 20 \text{ cm} = 300 \text{ cm}^2$

DF $\rightarrow 36 \text{ cm} \div 2 \text{ cm} = 18 \text{ cm}$

Area of Triangle DEF $\rightarrow \frac{1}{2} \times 18 \text{ cm} \times 20 \text{ cm} = 180 \text{ cm}^2$

Shaded area $\rightarrow 180 \text{ cm}^2 + 300 \text{ cm}^2 = 480 \text{ cm}^2$

Q10) Top View

Side View

Front View

Q11) $288 \div 2 = 144$

(At first) $3U \rightarrow 144 - 18 + 60 = 186$

$1U \rightarrow 186 \div 3 = 62$

$288 - 122 = 166$

Q12) Max number of chocolates can only be $13 \times 15 = 195$

38 Pupils	+6 pcs left	No. of packets
$38 \times 3 = 114$	$114 + 6 = 120$	$120 \div 15 = 8$
$38 \times 4 = 152$	$152 + 6 = 158$	$158 \div 15 = 10 \frac{8}{15} X$
$38 \times 5 = 190$	$190 + 6 = 196 X$	

$13 - 8 = 5$ (Ans)

Q13) $1 - \frac{3}{5} = \frac{2}{5}$
 $\frac{3}{8} \times \frac{2}{5} = \frac{3}{20}$
 $\frac{2}{5} - \frac{3}{20} = \frac{1}{4}$
 $\frac{3}{5} - \frac{1}{4} = \frac{7}{20} (\rightarrow 133)$
 $\frac{1}{20} \rightarrow 133 \div 7 = 19$
 $\frac{20}{20} \rightarrow 19 \times 20 = \mathbf{380}$

Q14) $1 - \frac{5}{8} = \frac{3}{8}$
 $1 - \frac{4}{7} = \frac{3}{7}$
(a) $8 - 7 = 1$
 $1U \rightarrow \$550$
(R) $8U \rightarrow \$550 \times 8 = \mathbf{\$4\ 400}$
(b) (M) $7U \rightarrow \$550 \times 7 = \mathbf{\$3\ 850}$
Left $\rightarrow \$550 \times 3 = \mathbf{\$1\ 650}$
T $\rightarrow \$1\ 650 + \$240 = \mathbf{\$1\ 890}$
 $\mathbf{\$4\ 400 + \$3\ 850 + \$1\ 890 = \$10\ 140}$

Q15) (a) $60 \times \$1.50 = \90
 $50 \times \$1.50 = \75
 $\mathbf{\$90 + \$75 = \$165}$
(b) $145 \times \$2 = \290
 $85 \times \$2 = \170
 $\mathbf{\$290 - \$170 = \$120}$

Q16) $8\ TD + 6E \rightarrow \$460$
 $2\ TD + 3E \rightarrow \$154$
 $8\ TD + 12E \rightarrow \616
 $6E \rightarrow \$616 - \$460 = \$156$
 $1E \rightarrow \$156 \div 6 = \mathbf{\$26\ (Ans)}$
 $\mathbf{\$100 \div \$26 = 3\ R\ \$22}$
Ans : 3

Q17) (a) $\frac{1}{5} \times \$690 = \138
 $\$690 - \$138 = \$552$
 $9U + 11U = 20U$
 $20 \div 5 = 4$
 $20 + 4 = 24$
 $1U \rightarrow \$552 \div 24 = \23
(W) $4U \rightarrow \$23 \times 4 = \mathbf{\$92}$
(b) $9U \rightarrow \$23 \times 9 = \mathbf{\$207}$
 $\mathbf{\$207 - \$138 = \$69}$