



NANYANG PRIMARY SCHOOL

**SECOND SEMESTRAL EXAMINATION
2015**

**PRIMARY 5
MATHEMATICS
PAPER 1**

DURATION: 50 MINUTES

| | |
|------------------|-------------|
| Booklet A | / 20 |
| Booklet B | / 20 |

| |
|-----------------------|
| Paper 1 Total: |
| / 40 |

Name: _____ ()

Class: Primary 5 ()

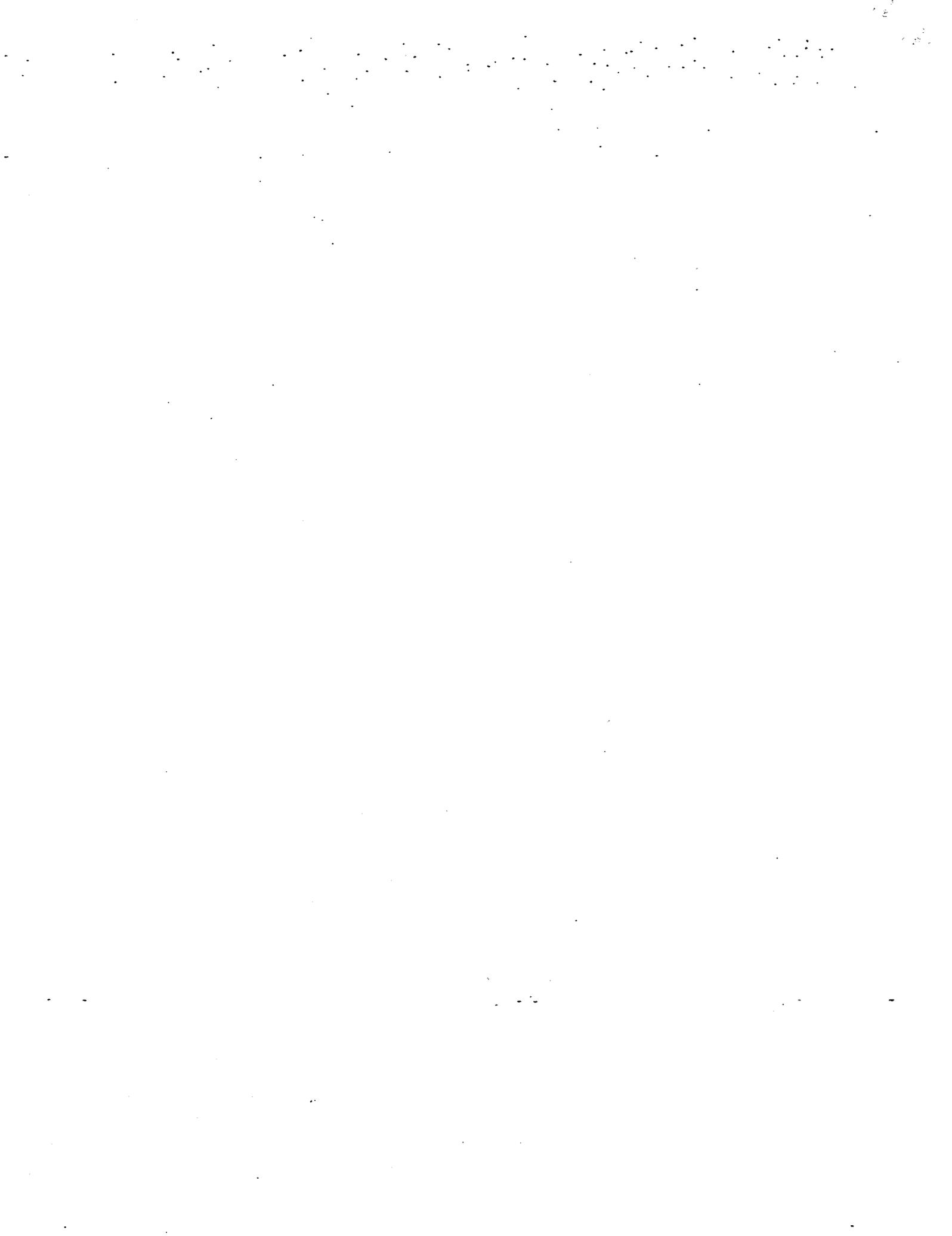
Date: 26 October 2015

Any query on marks awarded should be raised by 6 November 2015.
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: _____

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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 Round off 621 534 to the nearest thousand.

(1) 621 000

(2) 621 500

(3) 621 600

(4) 622 000

2 Find the value of $\frac{3}{7} + \frac{1}{3}$

(1) $\frac{4}{10}$

(2) $\frac{2}{5}$

(3) $\frac{2}{21}$

(4) $\frac{16}{21}$

3 What is the value of $\frac{4}{5} + 8$?

(1) $\frac{1}{7}$

(2) $\frac{1}{10}$

(3) $\frac{2}{5}$

(4) $\frac{32}{5}$

4 Observe the pattern below.

$$29.4 + 2 = 14.7$$

$$29.4 + \boxed{} = 0.147$$

What is the missing number in the box?

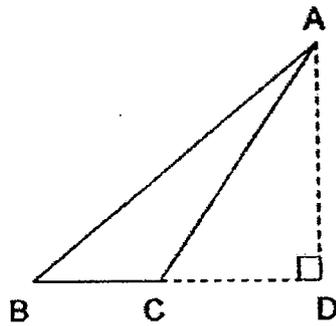
(1) 20

(2) 200

(3) 2000

(4) 20 000

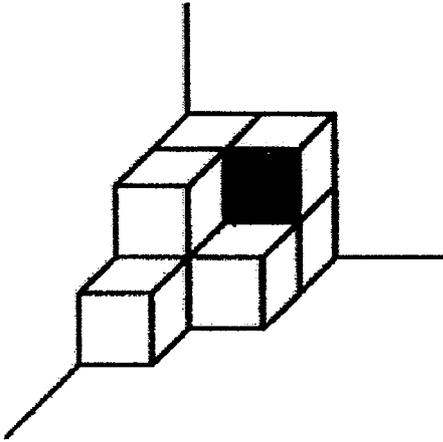
- 5 Given that the height of triangle ABC is AD, find its corresponding base.



- (1) AB
 - (2) AC
 - (3) BC
 - (4) BD
- 6 Which one of the following is the equivalent ratio of 8 : 3?

- (1) 16 : 12
- (2) 24 : 24
- (3) 40 : 15
- (4) 64 : 9

- 7 The solid below is made up of 2-cm cubes.
Find the volume of the solid.



- (1) 8 cm^3
(2) 16 cm^3
(3) 32 cm^3
(4) 64 cm^3
- 8 Which one of the following is the same as 6070 ml ?

- (1) $6 \text{ l } 7 \text{ ml}$
(2) $8 \text{ l } 70 \text{ ml}$
(3) $60 \text{ l } 7 \text{ ml}$
(4) $60 \text{ l } 70 \text{ ml}$

9 Mrs Goh gave \$20 000 to the elderly folks in the old folks centre. Each elderly folk received \$500. How many elderly folks were there?

(1) 4

(2) 40

(3) 400

(4) 4000

10 Sharifah had \$4000 in her bank account. The bank paid her an annual interest of 2%. She did not withdraw any of her savings. Find the amount of interest Sharifah got in a year.

(1) \$80

(2) \$800

(3) \$3920

(4) \$4080

11 Arrange the following fractions from the largest to the smallest.

$$\frac{5}{4}, 1\frac{1}{3}, \frac{9}{8}$$

(1) $\frac{9}{8}, 1\frac{1}{3}, \frac{5}{4}$

(2) $\frac{9}{8}, \frac{5}{4}, 1\frac{1}{3}$

(3) $1\frac{1}{3}, \frac{5}{4}, \frac{9}{8}$

(4) $1\frac{1}{3}, \frac{9}{8}, \frac{5}{4}$

12 The table below shows the number of picture cards 6 children had.

| Child | Number of picture cards |
|---------|-------------------------|
| Ai Mei | 3 |
| Bala | 3 |
| Chris | 2 |
| Deming | 0 |
| Emily | 4 |
| Fatimah | 0 |

What was the average number of picture cards the children had?

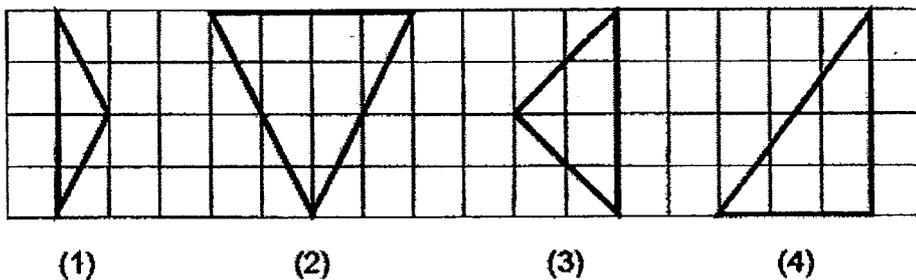
(1) 72

(2) 2

(3) 3

(4) 12

- 13 In the square grid below, which shape is a right-angled isosceles triangle?



- 14 Gopal wants to fill a rectangular container 6 m long, 4 m wide and 2 m high completely with water. Water costs \$2 per cubic metre. How much money will he need to pay for the water?

- (1) \$12
- (2) \$24
- (3) \$48
- (4) \$96

- 15 A table with 4 columns is filled with numbers in a certain pattern. The first 6 rows of the table are shown below.

| | Column A | Column B | Column C | Column D |
|-------|----------|----------|----------|----------|
| Row 1 | 1 | 2 | 3 | 4 |
| Row 2 | 7 | 6 | 5 | 5 |
| Row 3 | 8 | 9 | 10 | 10 |
| Row 4 | 14 | 13 | 12 | 11 |
| Row 5 | 15 | 15 | 16 | 17 |
| Row 6 | 20 | 20 | 19 | 18 |
| ⋮ | ⋮ | ⋮ | ⋮ | ⋮ |

In which column will the number 151 appear?

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

Name: _____ () Class: Pr 5 ()

PAPER 1 (BOOKLET B)

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

16 Find the value of $180 + (18 - 9) + 100$.

Ans: _____

17 Find the product of $\frac{2}{3}$ and $\frac{9}{10}$. Express your answer as a fraction in its simplest form.

Ans: _____

18 There were some boys, girls and adults in the exhibition hall. There were 6 boys for every 8 girls. There were 10 adults for every 6 boys. Find the ratio of the number of girls to the number of boys to the number of adults. Give your answer in the simplest form.

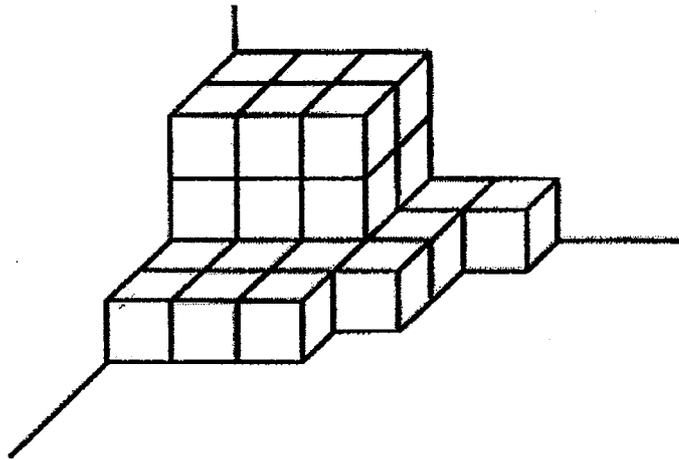
Ans: _____

19 Find the missing number in the box.

$$9 : 5 = \square : 30$$

Ans: _____

20 Unit cubes are used to build the solid below. Find the total number of unit cubes used to build it.



Ans: _____

21 Find the volume of a cube of edge 9 cm.

Ans: _____ cm^3

22 Express 3.58 kilometres in metres.

Ans: _____ m

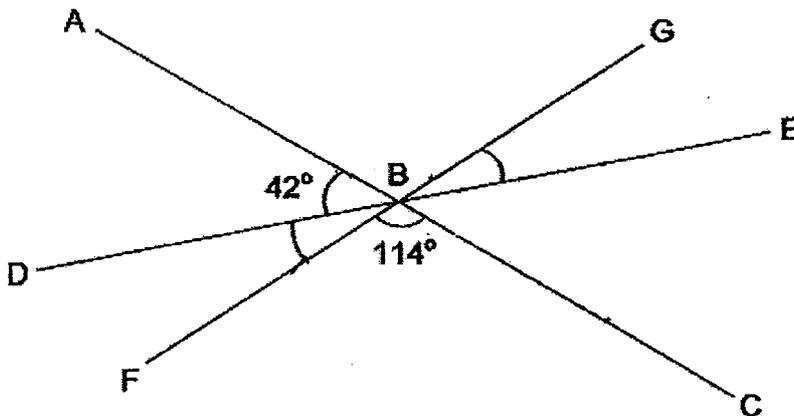
23 Express 4.3 as a percentage.

Ans: _____ %

24 Benny has 800 stamps in his collection. 70% of the stamps are foreign stamps. How many foreign stamps does he have?

Ans: _____

25 In the figure below, ABC, DBE and FBG are straight lines. Find $\angle GBE$.



Ans: _____ °

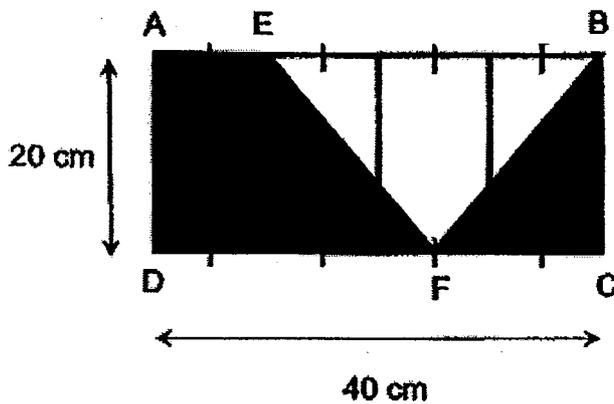
Questions 26 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

- 26 There are 20 apples in a basket. 9 of them are green while the rest are red. What percentage of the apples are red?

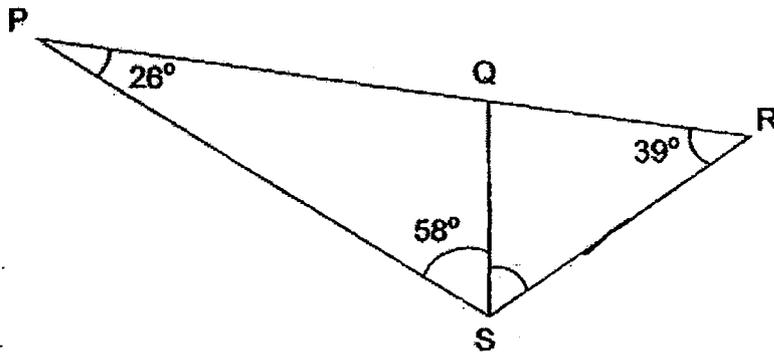
Ans: _____ %

- 27 In the figure below, ABCD is a rectangle. Find the area of triangle EBF.



Ans: _____ cm^2

28 In the figure below, PQR is a straight line. Find $\angle QSR$.



Ans: _____^o

- 29 The mass of a box with 200 identical notebooks is 51.2 kg. When $\frac{1}{2}$ of the number of notebooks is removed, the mass of the box with the remaining notebooks is 26.2 kg. Find the mass of each notebook.
Give your answer in kg, correct to 1 decimal place.

Ans: _____ kg

- 30 In a café, a set meal is made up of one snack, one main dish and one drink. In a set meal, the snack will be served first, followed by the main dish and the drink. How many different set meals can be formed using the menu shown below?

| Snack | Main dish | Drink |
|-------|-----------------|--------------|
| Fries | Fried Noodles | Coffee |
| Corn | Fried Rice | Tea |
| | Grilled Chicken | Orange Juice |
| | Grilled Fish | |
| | Hamburger | |
| | Sushi | |

Ans: _____

END OF PAPER





NANYANG PRIMARY SCHOOL
SECOND SEMESTRAL EXAMINATION
2015

PRIMARY 5
MATHEMATICS
PAPER 2

DURATION: 1 HOUR 40 MINUTES

| | |
|----------------------|--------------|
| Paper 2 Total | / 60 |
| GRAND TOTAL | / 100 |

Name: _____ ()

Class: Primary 5 ()

Date: 26 October 2015

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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 Mrs Deva needed $4\frac{2}{3}$ m of cloth to make a curtain. How much cloth would she need to make 8 such curtains? Give your answer as a mixed number in its simplest form.

Ans: _____ m

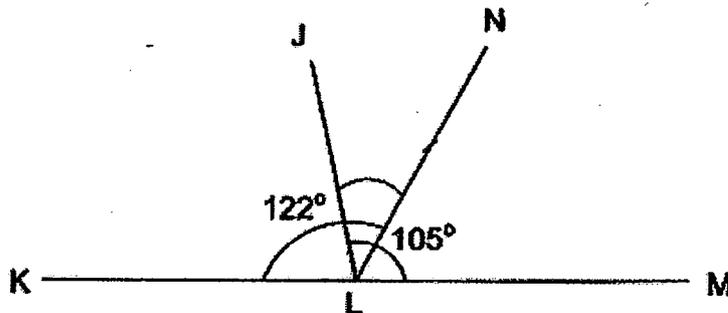
-
- 2 Mr Poon cut a piece of string into two pieces in the ratio of 12 : 19. The length of the longer piece was 95 cm. Find the length of the original piece of string.

Ans: _____ cm

- 3 The price of a laptop is \$2280 before GST (Goods and Services Tax). Steve has to pay 7% GST for the laptop. How much GST does Steve have to pay for buying the laptop?

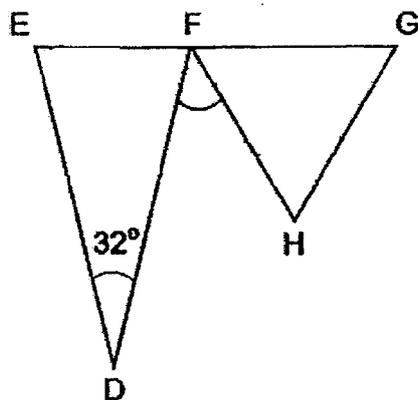
Ans: \$ _____

- 4 In the figure below, KLM is a straight line. $\angle KLN = 122^\circ$ and $\angle JLM = 105^\circ$. Find $\angle JLN$.



Ans: _____^o

- 5 In the figure below, DEF is an isosceles triangle such that $DE = DF$. FGH is an equilateral triangle. EFG is a straight line and $\angle EDF = 32^\circ$. Find $\angle DFH$.



Ans: _____^o

For questions 6 to 18, 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.

(50 marks)

- 6 At a fruit stall, the ratio of the number of oranges to the number of apples was 5 : 7. There were 640 more apples than oranges. The stall owner then sold 710 oranges. How many oranges were then left at the fruit stall?

Ans: _____ [3]

- 7 There was a total of $18\frac{3}{4}$ litres of water in Container A and Container B at first. There was a total of $16\frac{1}{5}$ litres of water in Container A and Container C at first. Peter then added $20\frac{1}{2}$ litres of water into Container B. How many more litres of water were there in Container B than Container C after Peter had added the water? Give your answer in litres.

Ans: _____ [3]

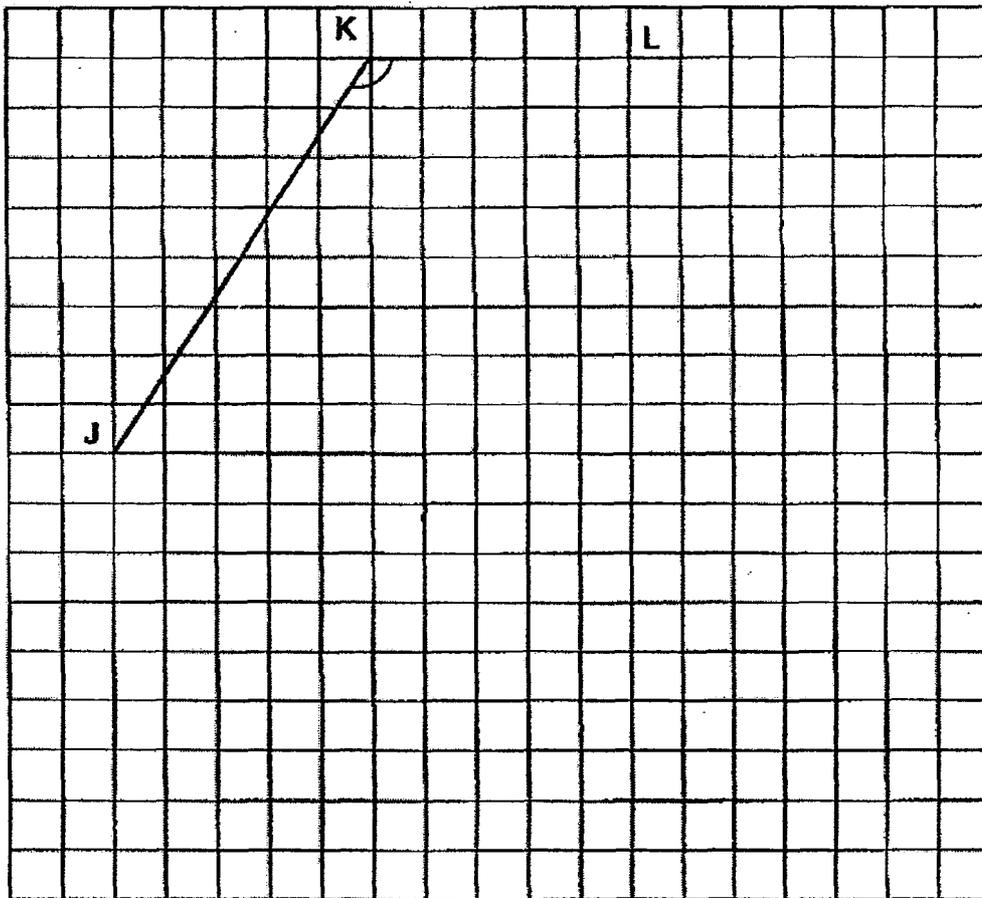
- 8 Mr Wong has 12 litres of water in a pail. He then pours some of the water from the pail into an empty rectangular tank measuring 30 cm long, 22 cm wide and 18 cm high. How much water is left in the pail after he has filled the tank with water to a depth of 14 cm? Give your answer in litres.

Ans: _____ [3]

9 In the square grid below, two sides of a parallelogram JKLM have been drawn.

(a) Measure and write down the size of $\angle JKL$.

(b) Complete the drawing of the parallelogram JKLM within the grid.



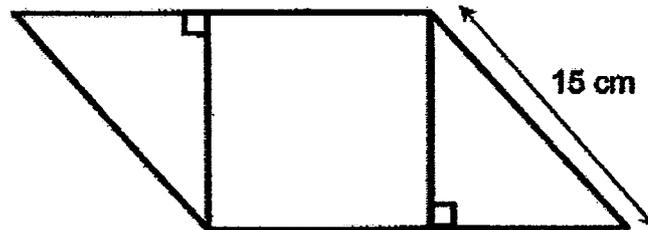
[2]

Ans: (a) _____ [1]

- 10 A group of children consists of 11 girls and 5 boys. The average height of the group of children is 122.5 cm. The average height of the girls is 3.2 cm more than the average height of the boys. Find the average height of the girls.

Ans: _____ [3]

- 11 The figure below is made up of a square and 2 identical right-angled triangles. The area of the square is 144 cm^2 . The perimeter of the figure is 72 cm . Find the area of one of the triangles.



Ans: _____ [4]

- 12 Mrs Choo went shopping with \$580. She bought a handbag and a bracelet at a discount. She spent 25% of her money on the bracelet. The total discount given for the two items was \$138. The usual price of the handbag was \$280 and she was given a 30% discount for the handbag. Find the usual price of the bracelet before the discount.

Ans: _____ [4]

- 13 Mr. Lee bought a total of 82 tables and chairs altogether. He was given a discount of \$10 per table and a discount of \$1.50 per chair. He paid \$310 less in all. How many tables did he buy?

Ans: _____ [4]

- 14** This year, the ratio of Julie's age to Kelly's age is 1 : 5. Kelly is 60 years old this year. In how many years' time will Kelly be 3 times as old as Julie?

Ans: _____ [4]

- 15 In the figure below, QRST is a trapezium. PQR and PUV are straight lines. PQU is an isosceles triangle such that $PQ = QU$. $\angle PRS = 128^\circ$. The size of $\angle UVT$ is $\frac{8}{9}$ the size of $\angle UTV$. Find $\angle UVT$.

Ans: _____ [4]

16 At the start of the year, Jonathan and Sarah received daily allowance from their mother. Jonathan received a fixed amount of allowance each day. Sarah received 30 cents more than Jonathan for daily allowance each day. Jonathan saved 90 cents more than Sarah each day. A number of days later, Sarah spent \$120 and Jonathan spent \$48.

(a) How many days did Sarah take to spend \$120?

(b) How much was Sarah spending each day, given that she spent the same amount of money each day?

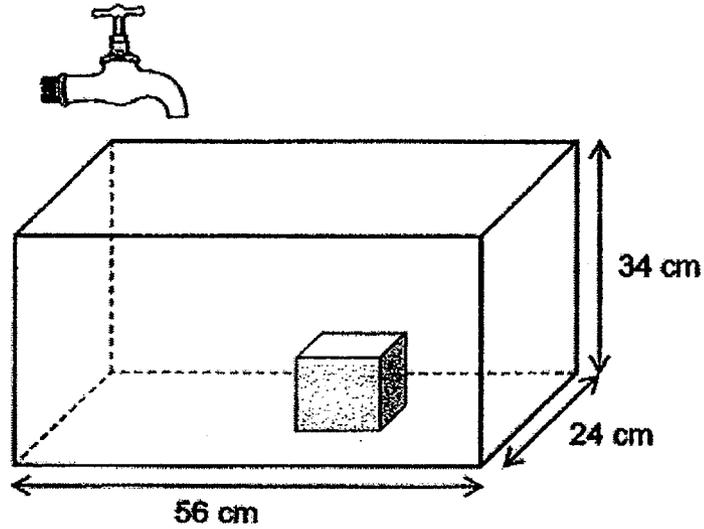
Ans: (a) _____ [3]

(b) _____ [2]

- 17** A group of pupils from School A, School B and School C collected a total of 5700 kg of old newspapers. Each pupil from School A collected 12 kg. Each pupil from School B collected 15 kg. Each pupil from School C collected 16 kg. Given that $\frac{1}{5}$ of these pupils were from School A, $\frac{1}{4}$ of the remaining pupils were from School B and the rest were from School C, how many pupils were from School C?

Ans: _____ [5]

- 18 Mike glued a metal cube onto the base of an empty rectangular tank as shown below. Mike then turned on a tap to fill the tank with water. Water from the tap flowed at a rate of 5.587 litres per minute. It took 8 minutes to fill the tank with water to its brim, with the metal cube being completely submerged. Find the length of one side of the metal cube.



Ans: _____ [5]

END OF PAPER

Answer Ke

EXAM PAPER 2015

SCHOOL : NANYANG

SUBJECT : P5 MATHEMATICS

TERM : SA12

ORDER CALL : MR GAN @ 92998971 92475053 86065443

| | | | | | | | | | |
|-----|-----|-----|-----|-----|----|----|----|----|-----|
| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 |
| 4 | 4 | 2 | 2 | 3 | 3 | 4 | 2 | 2 | 1 |
| Q11 | Q12 | Q13 | Q14 | Q15 | | | | | |
| 3 | 2 | 3 | 4 | 4 | | | | | |

16) $180 \div (18 - 9) + 100$

$$= 180 \div 9 = 100$$

$$= 20 + 100 = 120$$

17) $2/3 \times 9/10 = 3/5$

18) G : B : A

$$8 : 6 : 10$$

$$= 4 : 3 : 5$$

19) $5 \times 6 = 30$

$$9 \times 6 = 54$$

20) 28

21) $9 \times 9 \times 9 = 729 \text{cm}^3$

22) 1 km = 1000m

$$0.5 \text{km} = 500 \text{m}$$

Ans: 3580m

23) 430%

24) $800/100 \times 70 = 560$

$$25) 114^\circ \times 2 = 228^\circ$$

$$42^\circ \times 2 = 84^\circ$$

$$228^\circ + 84^\circ = 312^\circ$$

$$360^\circ - 312^\circ = 48^\circ$$

$$\angle GBE \rightarrow 48^\circ \div 2 = 24^\circ$$

$$26) 11 \times 100\% / 20 = 1100\% / 20 = 55\%$$

$$27) 40 \div 4 = 10$$

$$10 \times 3 = 30$$

$$\frac{1}{2} \times 30 \times 20 = 300 \text{cm}^2$$

$$28) 26^\circ + 39^\circ = 65^\circ$$

$$65^\circ + 58^\circ = 123^\circ$$

$$\angle QSR \rightarrow 180^\circ - 123^\circ = 57^\circ$$

$$29) 200 \div 2 = 100$$

$$51.2 \text{kg} - 26.2 \text{kg} = 25 \text{kg}$$

$$25 \text{kg} \div 100 = 0.250 \text{kg} \approx 0.3 \text{kg}$$

$$30) 1 \times 6 = 6$$

$$6 \times 3 = 18$$

$$18 \times 2 = 36$$

Paper 2

$$1) 4\frac{2}{3} \times 8/1 = 37\frac{1}{3} \text{ m}$$

$$2) 95 \div 19 = 5$$

$$12 + 19 = 31$$

$$31 \times 5 = 155 \text{ cm}$$

$$3) \$2280 / 100 \times 7 = \$159.60$$

$$4) \angle \text{KLJ} \rightarrow 180^\circ - 105^\circ = 75^\circ$$

$$\angle \text{JLN} \rightarrow 122^\circ - 75^\circ = 47^\circ$$

$$5) 180^\circ - 32^\circ = 148^\circ$$

$$\angle \text{DEF} \rightarrow 148^\circ \div 2 = 74^\circ$$

$$\angle \text{DFH} \rightarrow 180^\circ - 74^\circ - 60^\circ = 46^\circ$$

$$6) 7 - 5 = 2$$

$$640 \div 2 = 320$$

$$320 \times 5 = 1600$$

$$1600 - 710 = 890$$

$$7) 18\frac{3}{4} - 16\frac{1}{5} = 2\frac{11}{20}$$

$$2\frac{11}{20} + 20\frac{1}{2} = 23\frac{11}{20}$$

$$= 23.05 \text{ L}$$

$$8) 30 \text{ cm} \times 22 \text{ cm} \times 14 \text{ cm} = 9240 \text{ cm}^3$$

$$12 \text{ L} - 9.240 \text{ L} = 2.76 \text{ L}$$

9)a) 123°

10) $11 + 5 = 16$

$$122.5 \times 16 = 1960$$

$$3.2 \times 11 = 35.2$$

$$1960 - 35.2 = 1924.8$$

$$11 + 5 = 16$$

$$1924 \div 16 = 120.3$$

$$120.3 \times 11 = 1323.3$$

$$1323.3 + 35.2 = 1358.5$$

$$1358.5 \div 11 = 123.5 \text{ cm}$$

11) $12 \times 12 = 144$

$$72 - 12 - 12 - 15 - 15 = 18$$

$$18 \div 2 = 9$$

$$\frac{1}{2} \times 9 \times 12 = 54 \text{ cm}^2$$

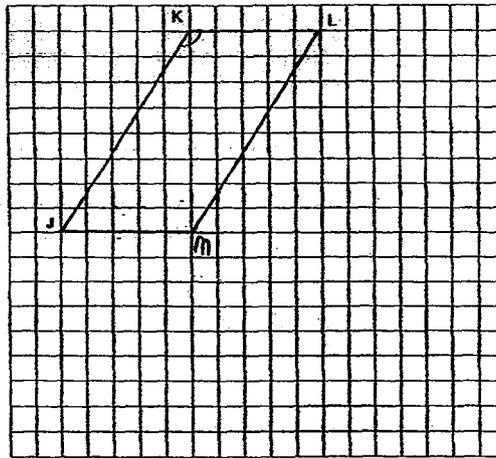
12) $580/100 \times 25 = \$145$

$$280/100 \times 30 = \$84$$

$$\$138 - \$84 = \$54$$

$$\$145 + \$54 = \$199$$

b)



$$13) 82 \times \$10 = \$820$$

$$\$820 - \$310 = \$510$$

$$\$10 - \$1.50 = \$8.50$$

$$\$510 \div \$8.50 = 60$$

$$82 - 60 = 22 \text{ tables}$$

$$14) 60 \div 5 = 12$$

$$3 - 12 = 48$$

$$3 - 1 = 2$$

$$48 \div 2 = 24$$

$$24 \times 3 = 72$$

$$72 - 60 = 12 \text{ years}$$

$$15) \angle RQU \rightarrow 180^\circ - 126^\circ = 54^\circ$$

$$\angle PQU \rightarrow 180^\circ - 54^\circ = 126^\circ$$

$$180^\circ - 126^\circ = 54^\circ$$

$$\angle QUP \rightarrow 54^\circ \div 2 = 27^\circ$$

$$180^\circ - 27^\circ = 153^\circ$$

$$8 + 9 = 17$$

$$153^\circ \div 17 = 9^\circ$$

$$9 \times 8 = 72^\circ$$

$$16) 90c + 30c = \$1.20$$

$$\$120 - \$48 = \$72$$

$$\$72 \div \$1.20 = 60 \text{ day (a)}$$

$$\$120 \div 60 = \$2 \text{ (b)}$$

$$17) 1 - 1/5 = 4/5$$

$$4/5 \times 1/4 = 1/5$$

$$1 - 1/5 - 1/5 = 3/5$$

$$12\text{kg} + 15\text{kg} = 27\text{kg}$$

$$16\text{kg} \times 3 = 48\text{kg}$$

$$48\text{kg} + 27\text{kg} = 75\text{kg}$$

$$5700\text{kg} \div 75\text{kg} = 76$$

$$76 \times 3 = 228\text{pupils}$$

$$18) 56\text{cm} \times 24\text{cm} \times 34\text{cm} = 45696\text{cm}^3$$

$$= 45.696\text{L}$$

$$5.587\text{L} \times 8 = 44.696\text{L}$$

$$45.696\text{L} - 44.696 = 1\text{L}$$

$$10\text{cm} \times 10\text{cm} \times 10\text{cm} = 1000\text{cm}^3 = 10\text{cm}$$

