

**SEMESTRAL ASSESSMENT 2
MATHEMATICS (PAPER 1)
PRIMARY 5**

Name: _____ ()

Form Class: P5 _____

Math Teacher: _____

Date: 26 Oct 2016

Duration: 50 min

Your Paper 1 Score (Out of 40 marks)	
Your Paper 2 Score (Out of 60 marks)	
Your Total Score (Out of 100 marks)	
Parent's Signature	

INSTRUCTIONS TO CANDIDATES

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer **ALL** questions and show all working clearly.
4. **NO** calculator is allowed for this paper.

Questions 1 to 10 carry 1 mark each. Question 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 your answer (1, 2, 3 or 4) on the OAS
provided. All diagrams are not drawn to scale.

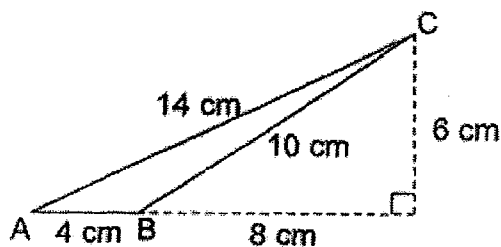
1. Round off 96.875 to the nearest hundredths.

- (1) 96.87
- (2) 96.88
- (3) 97
- (4) 100

2. Which of the following is equivalent to $8\frac{1}{6}$?

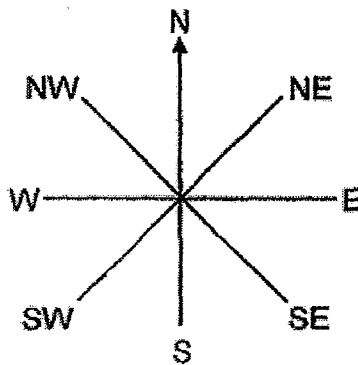
- (1) $\frac{9}{6}$
- (2) $\frac{14}{6}$
- (3) $\frac{48}{6}$
- (4) $\frac{49}{6}$

3. Find the area of triangle ABC.



- (1) 12 cm^2
- (2) 20 cm^2
- (3) 28 cm^2
- (4) 36 cm^2

4. The figure shows an 8-point compass. After turning 225° clockwise, John was facing north-east (NE). Which direction was he facing at first?



- (1) East
 - (2) West
 - (3) North
 - (4) South
5. Which one of the shapes below cannot be tessellated?



6. The price of a car is \$190 000 when rounded off to the nearest ten thousand dollars. Which of the following can be the greatest possible price of the car?

(1) \$184 999

(2) \$189 999

(3) \$194 999

(4) \$195 999

7. At a closing down sale, Fatimah enjoyed a discount of 40% and paid \$300 for a leather handbag. What was the usual price of the handbag?

(1) \$450

(2) \$500

(3) \$750

(4) \$1200

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

(1) 8.125

(2) 8.3

(3) 8.375

(4) 8.38

9. 45 children signed up for a robotics workshop. 27 of them were boys. What was the ratio of the number of girls to the number of boys?

(1) 2 : 3

(2) 2 : 5

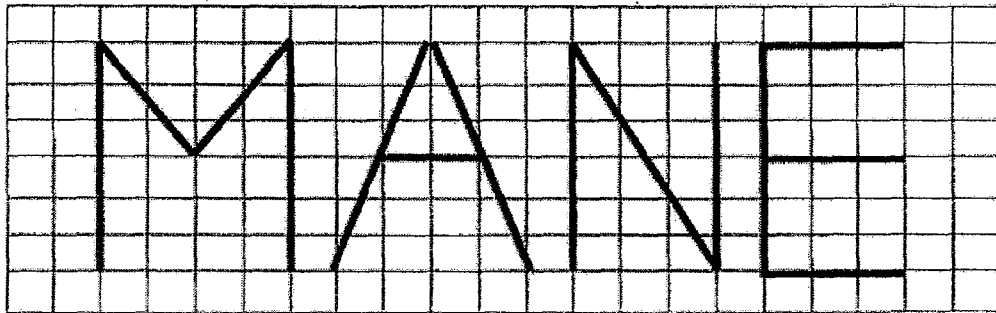
(3) 3 : 2

(4) 5 : 3

10. The average mass of a group of 4 children is 40 kg.
The individual masses for 3 of them are 42 kg, 38 kg and 46 kg.
Find the mass of the 4th child.

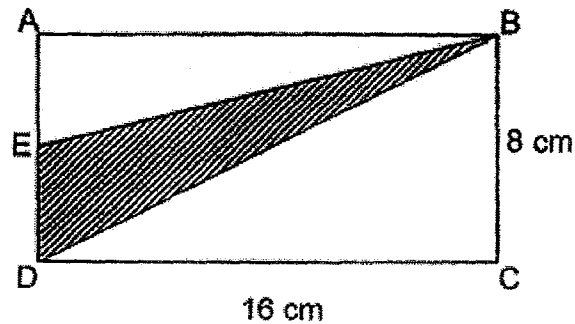
- (1) 34 kg
- (2) 38 kg
- (3) 40 kg
- (4) 44 kg

11. In the diagram below, the following letters are drawn on a grid.
Which letter does not have a line of symmetry?



- (1) M
 - (2) A
 - (3) N
 - (4) E
12. Alice and Bill each had a sum of money in the ratio of 3 : 4. They bought a necklace worth \$70 for their mother and shared the cost of the necklace equally. After that, the ratio of Alice's remaining money to the ratio of Bill's remaining money is 2 : 5. How much money did Alice have at first?
- (1) \$45
 - (2) \$90
 - (3) \$105
 - (4) \$210

13. In the figure below, ABCD is a rectangle. E is the midpoint of AD. Find the area of triangle EBD.



- (1) 16 cm^2
(2) 32 cm^2
(3) 64 cm^2
(4) 128 cm^2
14. Mary gave $\frac{1}{3}$ of her stamps to her brother and $\frac{1}{2}$ of her stamps to her sister.
She used $\frac{1}{4}$ of the remaining stamps.
What fraction of her stamps was left?
- (1) $\frac{1}{6}$
(2) $\frac{1}{8}$
(3) $\frac{1}{12}$
(4) $\frac{1}{24}$
15. A 2-digit number when divided by 40 gives a remainder of 9. Which of the following can be added to the number to change it to a multiple of 12?
- (1) 20
(2) 11
(3) 3
(4) 8

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.

All diagrams are not drawn to scale.

Answers in fractions or ratio must be expressed in the simplest form.

16. Arrange the following from the largest to the smallest.

$$1.07, 1\frac{1}{5}, 1.7, \frac{10}{7}$$

Ans: _____, _____, _____, _____

17. A ball-point pen costs \$1.55. How much will 30 similar ball-point pens cost?

Ans: \$_____

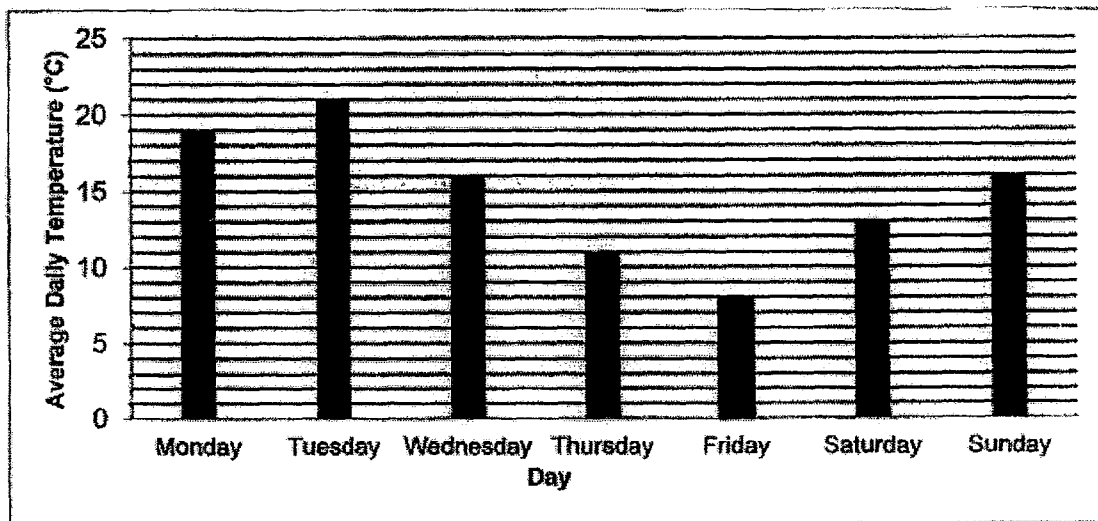
18. There are four children in the Koh family.
Kathy is younger than Chris.
Wendy is older than Kathy.
Jac is younger than Wendy but older than Chris.
Who is the third child in the Koh family?

Ans: _____

19. Find the value of $\frac{3}{8} \div 6$.

Ans: _____

20. The bar graph below shows the average daily temperature experienced by Country X in a week.



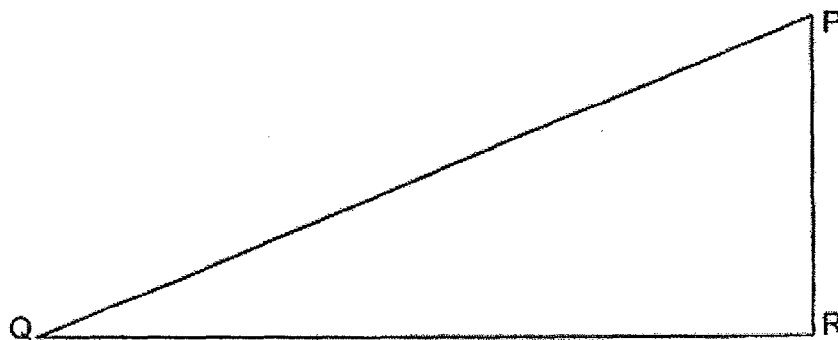
What was the difference in the highest and lowest average daily temperatures in that week?

Ans: _____ °C

21. Aisha saved \$250 and her sister saved twice as much as her. Aisha's brother saved \$100 less than Aisha. What was the average savings of Aisha and her siblings?

Ans: \$ _____

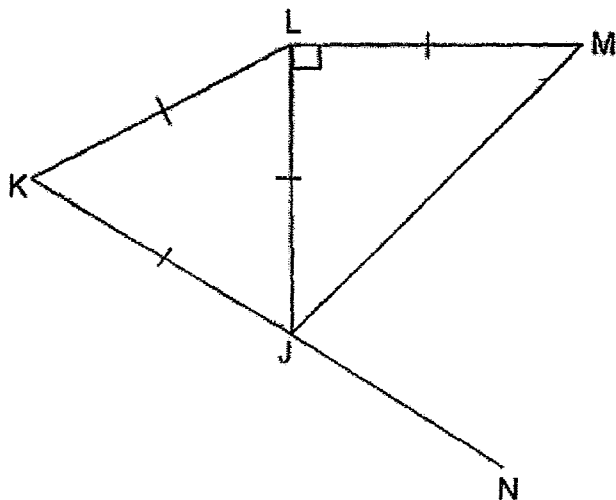
22. Measure and write down the size of $\angle PQR$.



Ans: _____ °

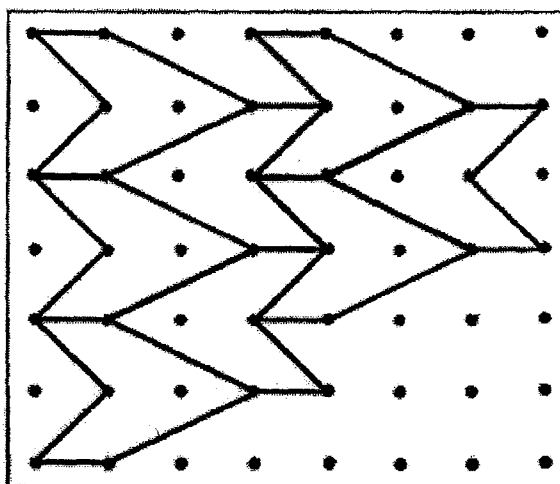


23. In the figure below, KJN is a straight line, LMJ is an isosceles triangle and KJL is an equilateral triangle. Find $\angle MJN$.



Ans: _____

24. The pattern in the box below shows part of a tessellation. Extend the tessellation by drawing two more unit shapes in the space provided within the box.



25. There were 120 people at a conference. 84 of them were men.
What percentage of the people at the conference were women?

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 space provided.

For questions which require units, give your answers in the units stated.

All diagrams are not drawn to scale.

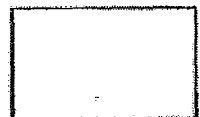
Answers in fractions or ratio must be expressed in the simplest form.

26. Auntie Sally uses 60 g of flour to make 7 cupcakes. How many kilograms of flour does she need to make 420 cupcakes?

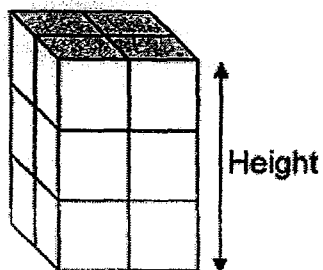
Ans: _____ kg

27. Express $9\frac{2}{3}$ as a decimal. Round off your answer to 2 decimal places.

Ans: _____



28. The figure shows a cuboid that is formed by putting 12 identical cubes together. The volume of the cuboid is 96 cm^3 . Find the height of the cuboid.



Ans: _____ cm

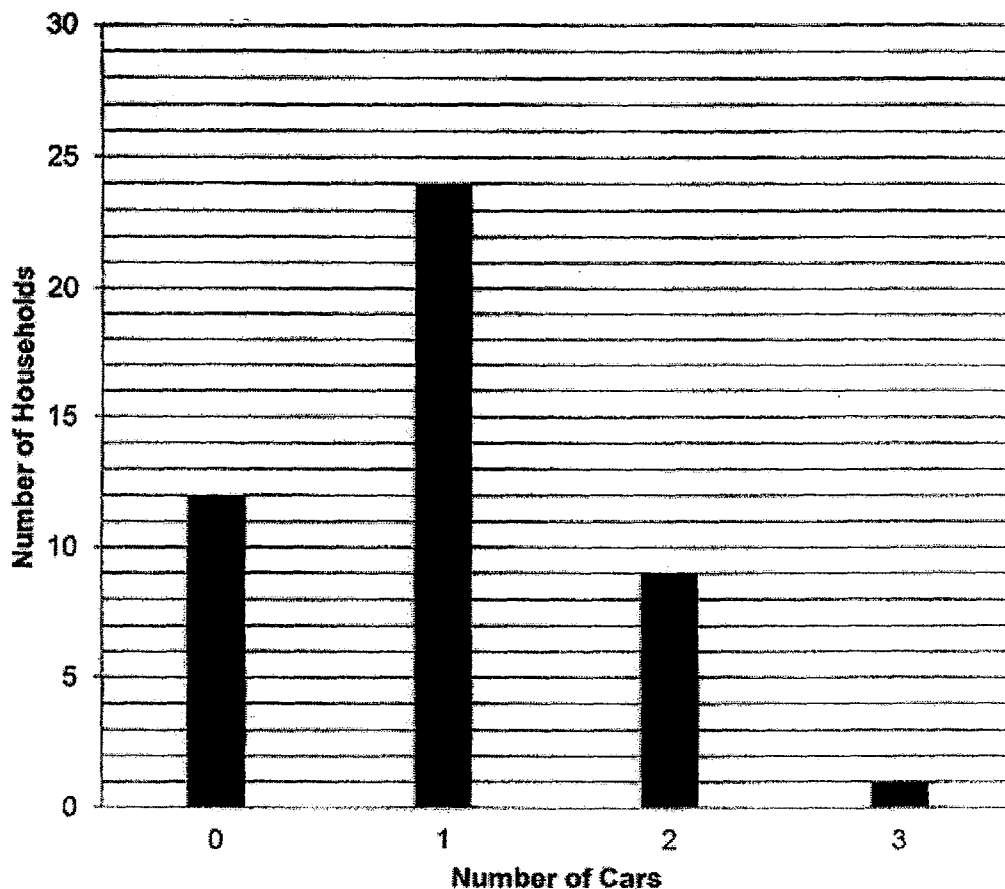
29. In the space below, draw and label a triangle EFG in which $EF = 8 \text{ cm}$, $\angle EFG = 40^\circ$ and $\angle FEG = 75^\circ$. The line EF has been drawn for you.

E

F



30. The bar graph below shows the number of cars each household has in Neighbourhood Z.

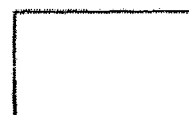


What is the total number of cars owned by the households in Neighbourhood Z?

Ans: _____

End of Paper
☺ Please check your work carefully ☺

Setters : Mrs J Seto
Ms Lim LS
Mdm Tan LZ



SEMESTRAL ASSESSMENT 2
MATHEMATICS (PAPER 2)
PRIMARY 5

Name: _____ ()

Form class: P5 _____

Math Teacher: _____

Date: 26 Oct 2016

Duration: 1 h 40 min

Your Paper 2 Score (Out of 60 marks)	
---	--

INSTRUCTIONS TO CANDIDATES

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer **ALL** questions and show all working clearly.
4. The use of calculator is allowed for this paper.

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.

Figures are not drawn to scale.

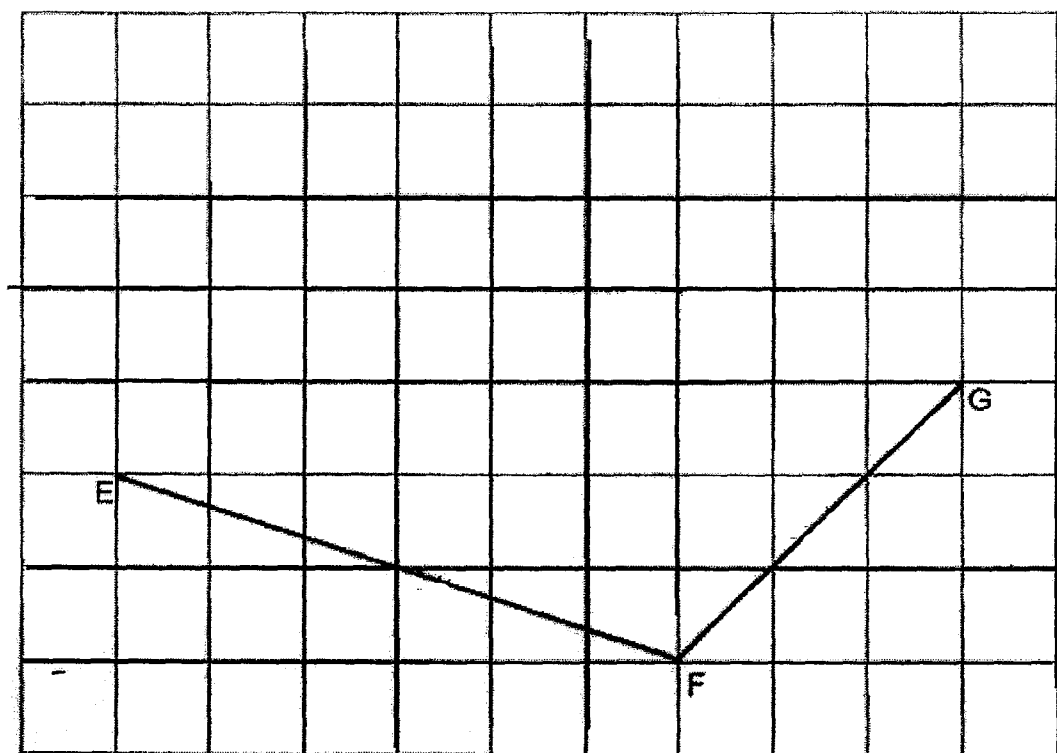
For questions which require units, give your answers in the units stated. (10 marks)

1. $6\frac{5}{8}$ kg of rice was packed equally into 5 bags.

How many grams of rice would there be in each bag?

Ans: _____ g [2]

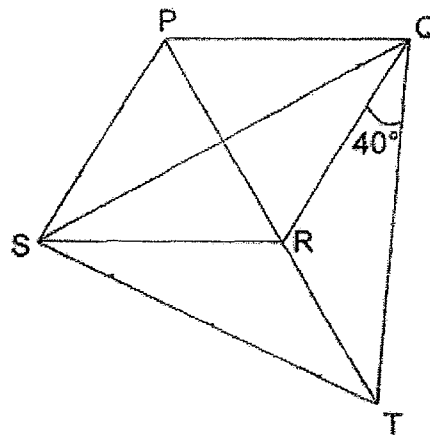
2. Draw a parallelogram EFGH within the grid provided. Sides EF and FG have been drawn for you. [2]



3. Bala had 104 more marbles than Ravi. After Ravi lost 38 marbles to Bala, Bala had 5 times as many marbles as Ravi.
How many marbles did Ravi have at first?

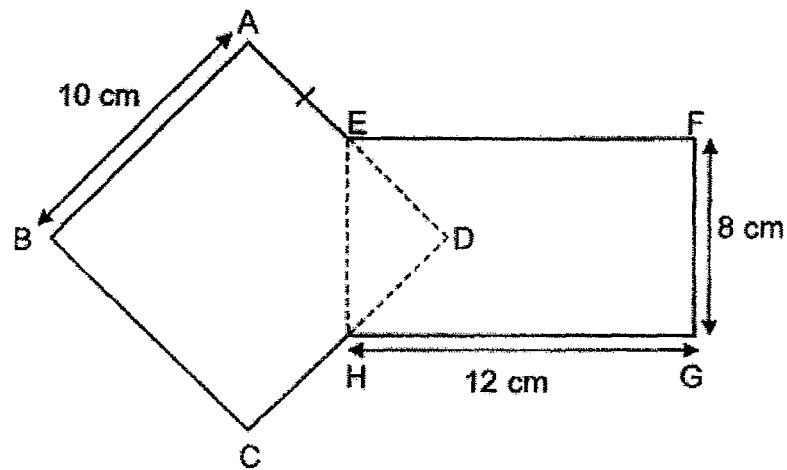
Ans: _____ [2]

4. In the figure below, PRT is a straight line. PQRS is a rhombus and QTS is an isosceles triangle. Find $\angle RTS$.



Ans: _____[°] [2]

5. The figure shown below is cut from a piece of paper. ABCD is a square and EFGH is a rectangle. Find the area of the figure.



Ans: _____ cm² [2]



For questions 6 to 18, show your working clearly in the space provided for each question and write your answers in the spaces provided.

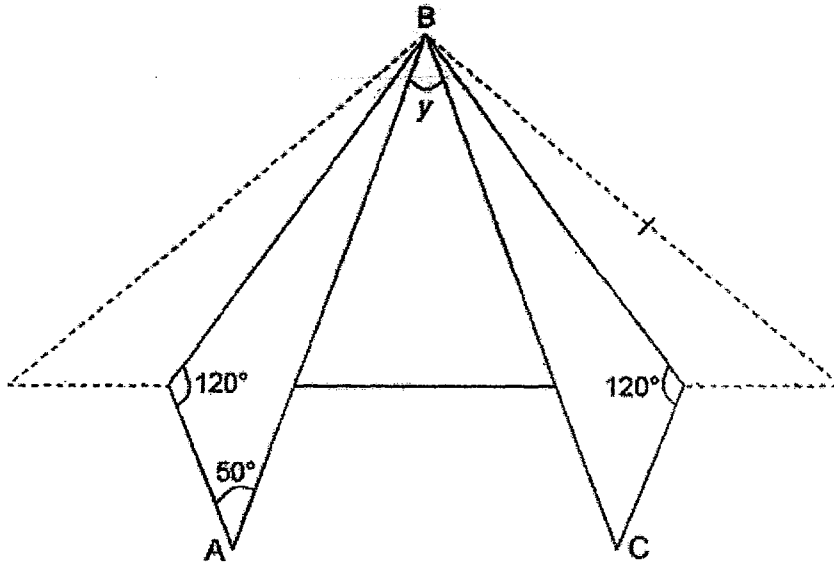
Figures are not drawn to scale.

The number of marks available is shown in the brackets [] at the end of each question or part-question. (50 marks)

6. The average of 12 numbers is 34. If 3 of the numbers are excluded, the average of the remaining numbers is reduced to 29. Find the sum of these 3 numbers.

Ans : _____ [3]

7. The diagram below shows an isosceles triangular piece of paper, ABC. The paper is folded at two of its corners, A and C. Find $\angle y$.



Ans: _____ [3]

8. A sum of money can be used to buy either 8 identical diaries or 20 identical calendars. Each diary cost \$14.10 more than each calendar. How much did each calendar cost?

Ans: _____ [3]

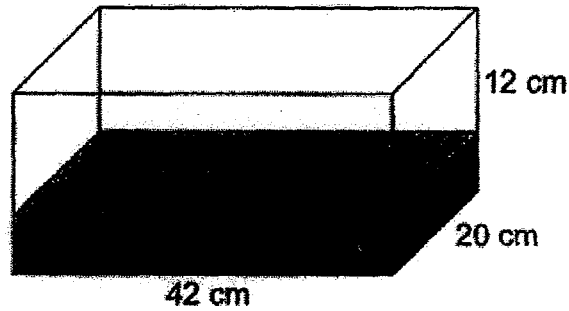


9. 32 cartons of mangoes were delivered to Mr Lim's fruit stall.
Each carton contained 48 mangoes. For every 4 cartons, 9 rotten mangoes were thrown away. The remaining mangoes were packed into bags of 6 and each bag was sold for \$15.
What was the total amount of money Mr Lim collected when all the bags of mangoes were sold?

Ans: _____ [4]



10. The tank measuring 42 cm by 20 cm by 12 cm was $\frac{1}{5}$ filled with water. After some water was added into the tank, the tank became $\frac{3}{4}$ full. How much water was added to the tank?



Ans : _____ [3]



11. Meg, Jo and Beth shared a sum of money. Beth had 3 times the amount of money that Jo had. The ratio of the amount of money Beth had to the total amount of money Meg and Jo had was 4 : 5. Meg and Beth had \$299 altogether.

What was the sum of money shared by the three girls?

Ans: _____ [3]



12. Uncle Ravi organised a lucky draw event . He spent \$382.20 on some soft toys and keychains. He bought 6 more keychains than soft toys. A soft toy costs \$14.70 and a keychain costs \$4.90. How many keychains did Uncle Ravi buy?

Ans : _____ [5]



13. Hazel had 520 beads. 35% of her beads were black and the rest were red. After using 95 beads to make a necklace, 40% of the remaining beads were black. How many red beads did she use?

Ans: _____ [4]




14. At a supermarket, Mr Teo bought 300 g of fish and 400 g of meat for \$21.10. At the same supermarket, Mrs Peng bought 200 g of fish and 300 g of meat for \$14.60. If Mrs Peng were to buy another 1.6 kg of fish, how much would she have to pay in total?

Ans: _____ [4]



15.



COZY SOLES
Member's Birthday Special!
1st pair of shoes at 20% discount*
2nd pair of shoes at 30% discount*

*before GST

Michelle bought 2 pairs of shoes at the store and paid a total amount of \$262.15 including 7% GST.

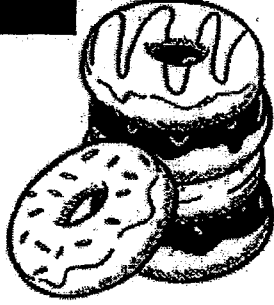

- (a) How much did the 2 pairs of shoes cost before GST?
- (b) The usual price for Michelle's second pair of shoes was \$190 before GST.
What was the usual price of her first pair of shoes before GST?

Ans : (a) _____ [1]

(b) _____ [4]



16. Bake's Haven was having its 1st anniversary promotion for donuts and cupcakes at the prices shown below

Baker's Haven 1st Anniversary Promotion!	
	
5 donuts for \$9	3 cupcakes for \$7

Mrs Kim spent an equal amount of money on the donuts and cupcakes for her company party. She bought 40 more donuts than cupcakes.

What was the total number of donuts and cupcakes bought by Mrs Kim?

Ans: _____ [4]



17. Jane only had 20c coins and George only had 50c coins. Jane had 200 coins. The ratio of the number of Jane's coins to the number of George's coins was 5 : 1. After Jane gave some of her coins to George, the ratio of the number of Jane's coins to the number of George's coins became 2 : 7.
- (a) How many coins did Jane give to George?
- (b) What was the total value of coins George had in the end?

Ans: (a) _____ [2]

(b) _____ [3]



18. Helen had 248 marbles more than Ali. After Helen gave $\frac{3}{4}$ of her marbles to Ali, Ali had 364 marbles more than Helen. How many marbles did Ali have at first?

Ans: _____ [4]

End of Paper
Please check your work carefully ☺

Setters : Mrs J Sato
Ms Lim LS
Mdm Tan LZ



ANSWER SHEET

EXAM PAPER 2016 (P5)

SCHOOL : RAFFLES GIRLS'

SUBJECT : MATHEMATICS

TERM : SA2

ORDER CALL : MR GAN @ 92998971 92475053 86065443

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

16) 1.7, $10/7$, $1\frac{1}{5}$, 1.07

17) \$46.50

18) Chris

19) $1/16$

20) 13°C

21) 300

22) 23°

23) 75°

24)

25) 30%

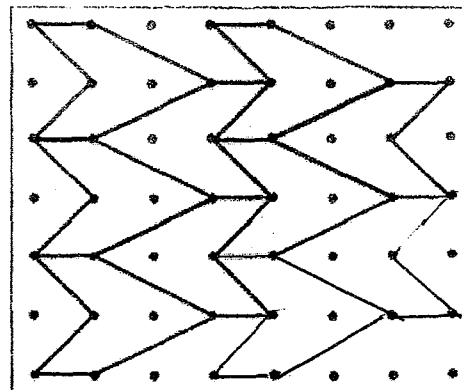
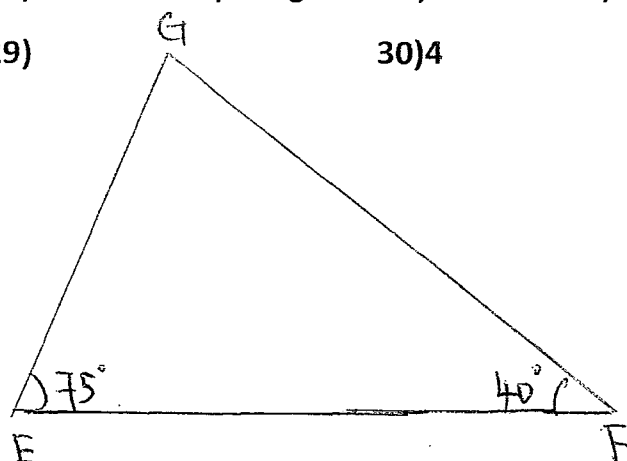
26) 3.6kg

27) 9.67

28) 6cm

29)

30) 4

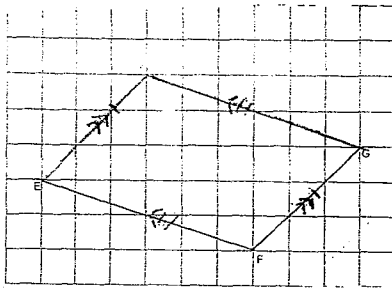


Paper 2

1) $5/8 = 0.625$

$$6.625 \div 5 = 1.325g$$

2)



3) $4u \rightarrow 38 + 104 + 38 = 180$

$$1u \rightarrow 45$$

$$45 + 38 = 83$$

4) $30 \times 2 = 60$

$$180 - 60 = 120$$

$$360 - 120 = 240$$

$$240 \div 2 = 120$$

$$120 + 40 = 160$$

$$180 - 160 = 20^\circ$$

5) $10 \div 2 = 5$

$$\frac{1}{2} \times 5 \times 5 = 12.5$$

$$10 \times 10 = 100$$

$$12 \times 8 = 96$$

$$96 - 12.5 = 83.5$$

$$83.5 + 100 = 183.5\text{cm}^2$$

6) $12 \times 34 = 408$

$$12 - 3 = 9$$

$$9 \times 29 = 261$$

$$408 - 261 = 147$$

7) $120 + 50 = 170$

$$180 - 170 = 10$$

$$10 \times 4 = 40$$

$$50 \times 2 = 100$$

$$100 + 40 = 140$$

$$180 - 140 = 40^\circ$$

8) $8 \times 14.10 = 112.80$

$$8u + 112.80 = 20u$$

$$20u - 8u = 112.80$$

$$12u = 112.80$$

$$1u = 112.80 \div 12 = \$9.40$$

9) $48 \times 32 = 1536$ (mangoes altogether)

$$32 \div 4 = 8$$

$$8 \times 9 = 72$$
 (rotten mangoes)

$$1536 - 72 = 1464$$
 (remaining mangoes)

$$1464 \div 6 = 244$$
 (no. of bags)

$$244 \times 15 = \$3660$$

10) $42 \times 20 \times 12 = 10080$

$\frac{1}{5} \times 10080/1 = 2016$

$\frac{3}{4} \times 10080/1 = 7560$

$7560 - 2016 = 5544\text{ml}$

11) $15u - 4u = 11u$

$11u + 12u = 23u$

$23u \rightarrow 299$

$1u \rightarrow 299 \div 23 = 13$

$12u + 15u = 27u$

$27u \rightarrow 13 \times 27 = \351

12) $6 \times 4.90 = 29.40$

$382.20 - 29.40 = 352.80$

$14.70 + 4.90 = 19.60$

$352.80 \div 19.60 = 18$

$18 + 6 = 24$

13) $35/100 \times 520/1 = 182$ (black beads at first)

$520 - 182 = 338$ (red beads at first)

$520 - 95 = 425$

$40/100 \times 425/1 = 170$ (black beads in the end)

$425 - 170 = 255$ (red beads in the end)

$338 - 255 = 83$

14) $21.10 - 14.60 = 6.50$

$100F + 100M = 6.50 \rightarrow 300F + 300M = 19.50$

$200F + 300M = 14.60$

$100F = 4.90$

$1600F = 4.90 \times 16 = 78.40$

$14.60 + 78.40 = \$93$

15)a) $262.15 \div 107 = 2.45$

$2.45 \times 7 = 17.15$

$262.15 - 17.15 = \$245$

b) discounted price of 2nd pair $\rightarrow 70\% \times \$190 = \$133$

discounted price of 1st pair $\rightarrow \$245 - \$133 = \$112$

$80\% - \$112$

$100\% - (\$112 \div 80) \times 100 = \140

16) Lowest common multiple of 9 and 7 is 63

No. of donuts purchased with \$63 $\rightarrow (63 \div 9) \times 5 = 35$

No. of cupcakes purchased with \$63 $\rightarrow (63 \div 7) \times 3 = 27$

Diff between no. purchased for every \$63 $\rightarrow 35 - 27 = 8$

No. of groups $\rightarrow 40 \div 8 = 5$

Total bought $\rightarrow 5 \times (35 + 27) = 310$

17) J : G : total

$$5 : 1 : 6$$

$$15 : 3 : 18$$

$$2 : 7 : 9$$

$$4 : 14 : 18$$

$$3u \rightarrow 17 \times 3 = 51$$

$$11u \rightarrow 17 \times 11 = 187$$

$$187 \times 0.2 = 37.40$$

$$51 \times 0.5 = 25.50$$

$$37.40 + 25.5 = \$62.90$$

a) 187

b) \$62.90

18) Before

$$\text{Helen} \quad 4u + 248$$

$$\text{Ali} \quad 4u$$

After

$$\text{Helen} \quad 1u + 62$$

$$\text{Ali} \quad 4u + 3u + 186$$

$$7u + 186 = 1u + 62 + 364$$

$$6u = 426 - 186 = 240$$

$$1u \rightarrow 240 \div 6 = 40$$

$$4u \rightarrow 4 \times 40 = 160$$

