

SEMESTRAL ASSESSMENT 1
MATHEMATICS (PAPER 1)
PRIMARY 5

Date: 9 May 2016

Duration: 50 min

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.

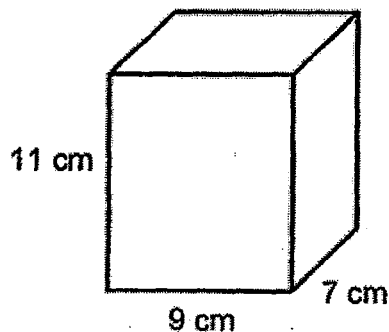
1. In 3 694 078, the digit 6 is in the _____ place.

- (1) hundreds
- (2) thousands
- (3) ten thousands
- (4) hundred thousands

2. $135 \times 2400 = 135 \times \underline{\quad} \times 60$

- (1) 4
- (2) 40
- (3) 400
- (4) 4000

3. Find the volume of the cuboid shown below.



- (1) 63 cm^3
- (2) 99 cm^3
- (3) 478 cm^3
- (4) 693 cm^3

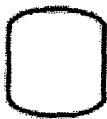
4. What is the missing number in the box below?

$$\frac{\boxed{}}{15} = \frac{12}{18}$$

- (1) 5
 - (2) 9
 - (3) 10
 - (4) 14
5. Express $\frac{61}{7}$ as a mixed number.

- (1) $5\frac{6}{7}$
- (2) $6\frac{1}{7}$
- (3) $8\frac{5}{7}$
- (4) $9\frac{2}{7}$

6. Which of the following figures can be tessellated?



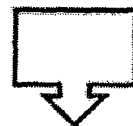
A



B



C



D

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

7. Look at the number below.

504.079

Which digit is in the hundredths place?

- (1) 1
- (2) 5
- (3) 7
- (4) 9

8. Express 8.16 as a mixed number in its simplest form.

- (1) $8\frac{16}{100}$
- (2) $8\frac{8}{50}$
- (3) $8\frac{4}{25}$
- (4) $8\frac{1}{16}$

9. In a class of 30 pupils, there are 12 girls. What is the ratio of the number of girls to the number of boys?

- (1) 2 : 3
- (2) 2 : 5
- (3) 3 : 2
- (4) 5 : 2

10. Write 9 hundreds, 4 ones and 6 thousandths in decimal.

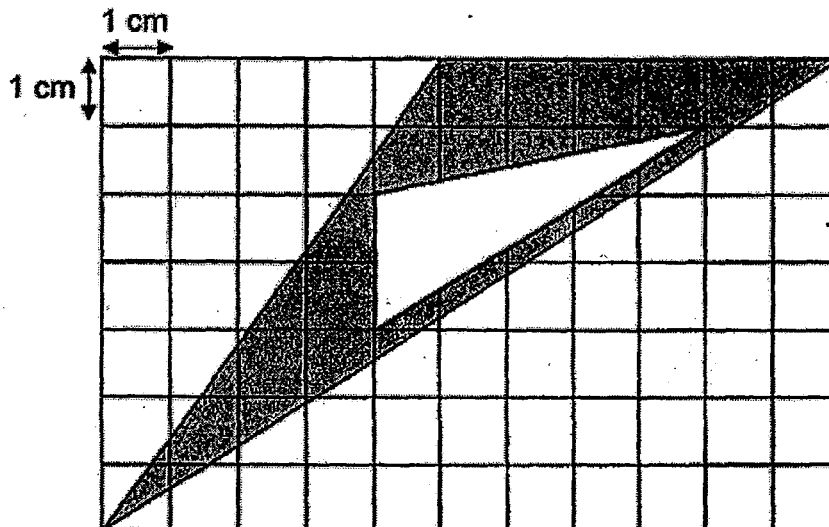
(1) 904.06

(2) 904.006

(3) 940.06

(4) 940.006

11. Find the total shaded area in the figure below.



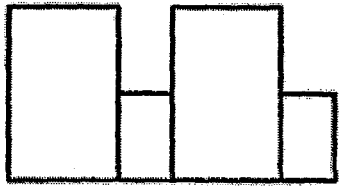
(1) 16 cm^2

(2) 21 cm^2

(3) 26 cm^2

(4) 32 cm^2

12. Which of the following figures have a line of symmetry?



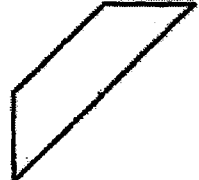
A



B



C



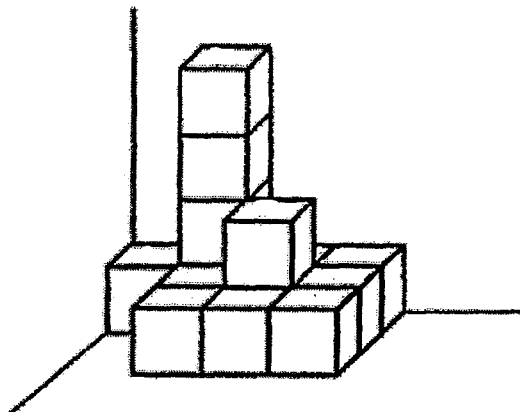
D

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

13. Hannah went to the gym once every 4 days while Vishnu went to the same gym once every 6 days. They became friends after meeting each other at the gym on a Saturday. Which would be the next earliest day that they would meet each other again at the gym?

- (1) Tuesday
- (2) Wednesday
- (3) Thursday
- (4) Friday

14. The solid below is made up of some identical 1-cm cubes.
What is the volume of the solid?



- (1) 12 cm^3
(2) 13 cm^3
(3) 14 cm^3
(4) 15 cm^3
15. $\frac{4}{9}$ of is 324. What is the value of the missing number in the box?

- (1) 36
(2) 144
(3) 678
(4) 729

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.

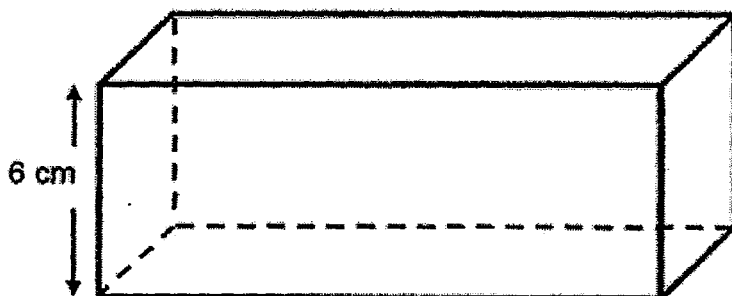
16. Find the value of 564×78 .

Ans: _____

17. The number of pupils in a school when rounded off to the nearest hundred was 1 900 people. What was the smallest possible number of pupils in the school?

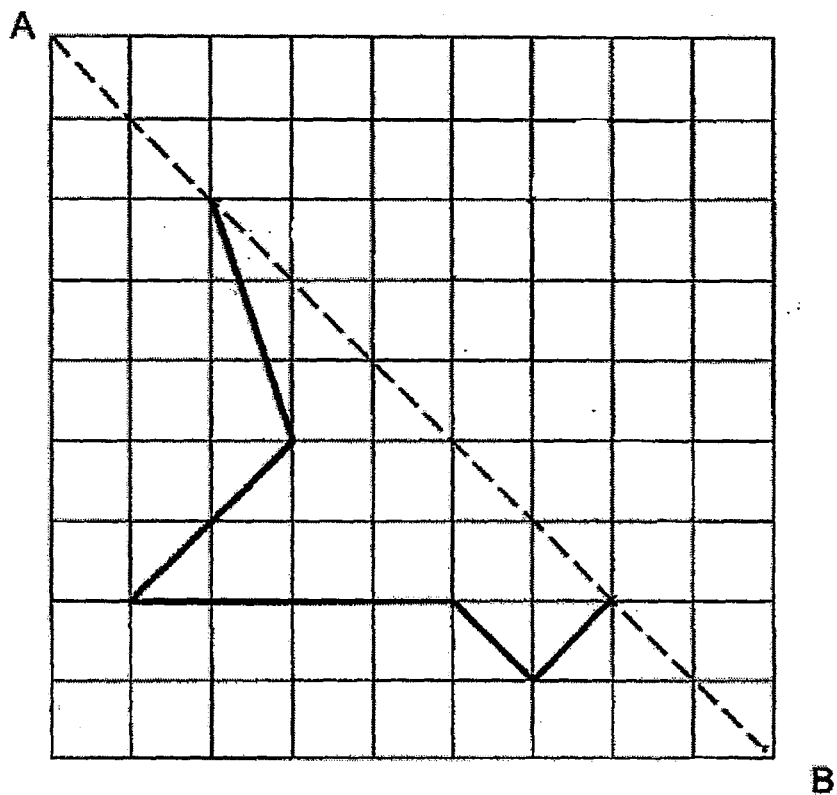
Ans: _____

18. The cuboid below has a volume of 510 cm^3 . Find the area of the base of the cuboid, given that its height is 6 cm.

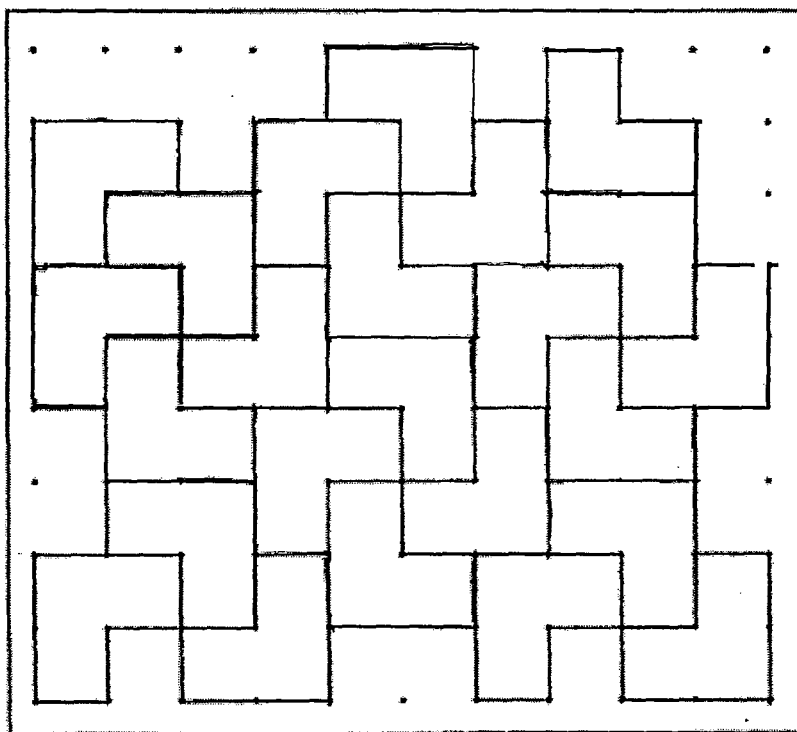


Ans: _____ cm^2

19. Given that AB is a line of symmetry, complete the figure below.



20. Shade the unit shape that is incorrectly tessellated in the figure below.



21. Miko had $\frac{2}{9}$ kg of rice. She used $\frac{1}{6}$ kg of her rice to make some sushi.
How much rice did she have left?

Ans: _____ kg

22. Express $\frac{5}{8}$ as a decimal.

Ans: _____

23. Find the value of $36.701 \div 7$.

Ans: _____

24. Find the value of $5\frac{7}{10} - 1.44 + 60$.

Ans: _____

25. Mrs Wong bought 30 banana cupcakes, 36 raisin cupcakes and 54 walnut cupcakes. Find the ratio of the number of raisin cupcakes to the total number of banana and walnut cupcakes.

Leave your answer in the simplest form.

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. A car can travel 207 km on 9 litres of fuel.

How far can the car travel with 30 litres of fuel?

Ans: _____ km

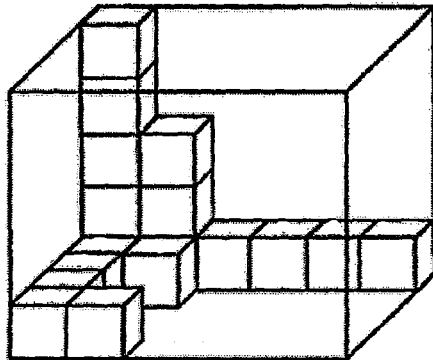
27. $28 + 240 \div (3 \times 4) - (15 - 5) =$ _____

Ans: _____

28. The base of a cubical tank has an area of 144 cm^2 . The tank is $\frac{1}{3}$ filled with water. Find the volume of water in the tank.

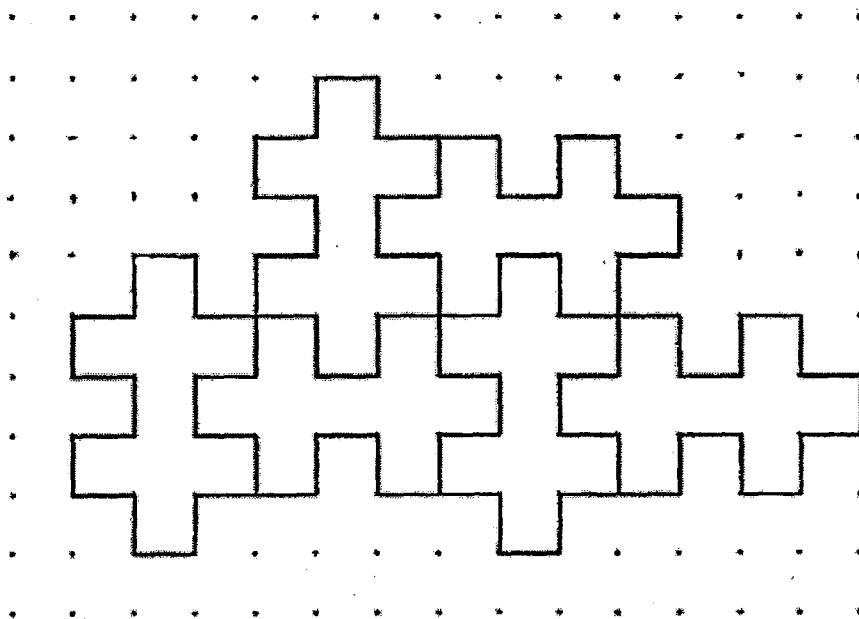
Ans: _____ cm^3

29. The figure below shows a rectangular glass box partly filled with unit cubes. How many more unit cubes must be added to the glass box for it to be completely filled with unit cubes?



Ans: _____

30. Extend the tessellation by drawing 2 more unit shapes.



End of Paper
☺ Please check your work carefully ☺

Setters: Ms Tan Y. T.
Ms Teo S. H.
Mrs J. Seto

SEMESTRAL ASSESSMENT 1
MATHEMATICS (PAPER 2)
PRIMARY 5

Date: 9 May 2016

Duration: 1 h 40 min

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. 48 pupils participated in a run. $\frac{3}{8}$ of the pupils were girls.
How many boys participated in the run?

Ans: _____ [2]

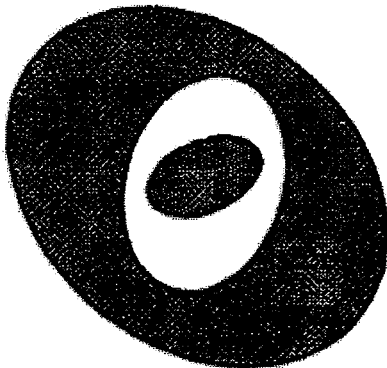
2. I am a common factor of 24 and 36.
I am a multiple of 4 and 6.
I am greater than 10
What number am I?

Ans: _____ [2]

3. Aisha had 1272 marbles. She gave $\frac{1}{3}$ of her marbles to Bala and $\frac{1}{4}$ of her marbles to Catherine. How many marbles did she give away?

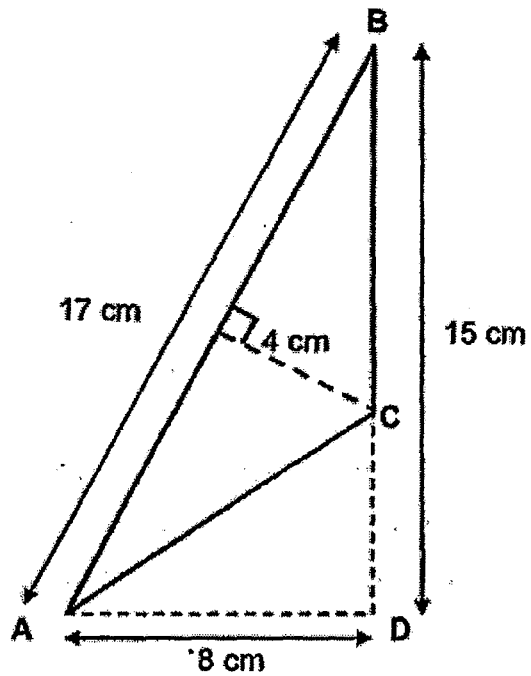
Ans: _____ [2]

4. Mathew designed a logo using three ovals. The areas of the ovals were in the ratio of 1 : 4 : 13. He then shaded some parts of the logo as shown. What was the ratio of the shaded area to the unshaded area of the logo?



Ans: _____ [2]

5. What is the area of triangle ABC as shown in the figure below?



Ans: _____ cm^2 [2]

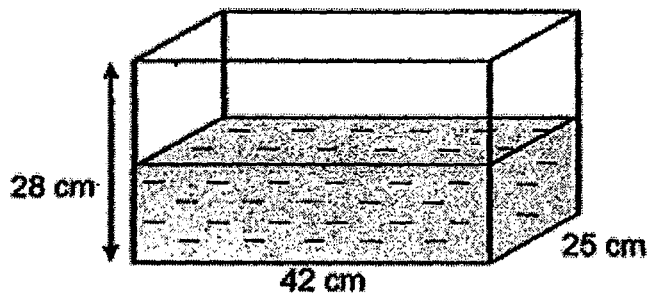
For questions 6 to 18, show your working clearly in the space provided for each question and write your answers in the spaces provided.

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. In the figure below, a fish tank measuring 42 cm by 25 cm by 28 cm was filled with water to its brim. Then, 10.08 ℓ of water was removed from the fish tank.

Find the volume of water left in the tank.



Ans : _____ [3]

7. Katrina had some red, blue and green beads in the ratio of 5 : 4: 6. She had a total of 385 red and green beads. How many blue beads did she have?

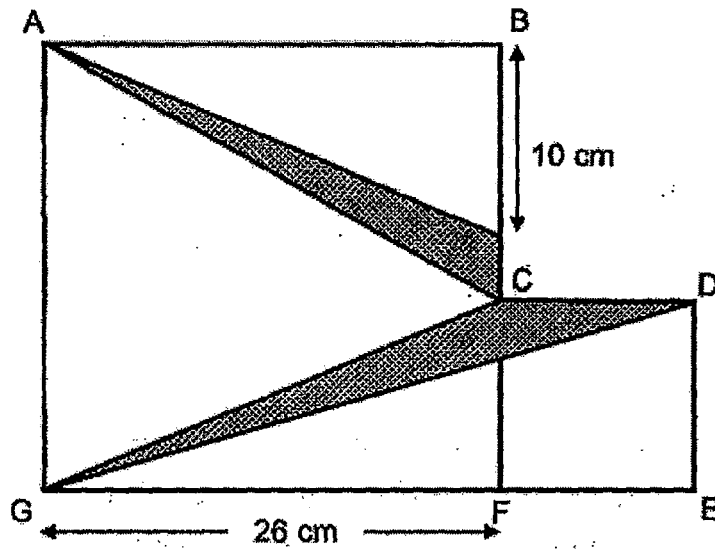
Ans: _____ [3]

8. Manesh had \$124 more than Putri. Putri spent \$29 on a book and gave \$42 to Manesh. In the end, Manesh had 4 times as much money as ~~money as~~ Putri. How much money did Putri have at first?

Ans: _____ [3]

9. ABFG and CDEF are squares. The area of CDEF is 121 cm^2 .

Find the total shaded area in the figure.

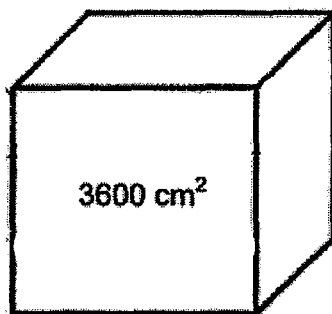


Ans: _____ [4]

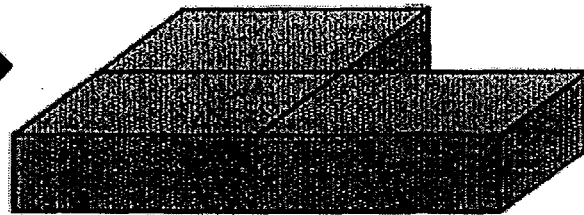
10. Xiao Hui had some 20¢ and 50¢ coins which added up to \$20.30.
She had 14 more 20¢ coins than 50¢ coins. How many 20¢ coins did she have?

Ans: _____ [4]

11. The area of one face of the wooden cube below is 3600 cm^2 . A carpenter cut the wooden cube into three cuboids of identical size. After gluing the cuboids together to make a solid figure as shown below, he painted all the surfaces of the solid figure red. What was the total surface area of the solid figure that had been painted red?



Wooden Cube



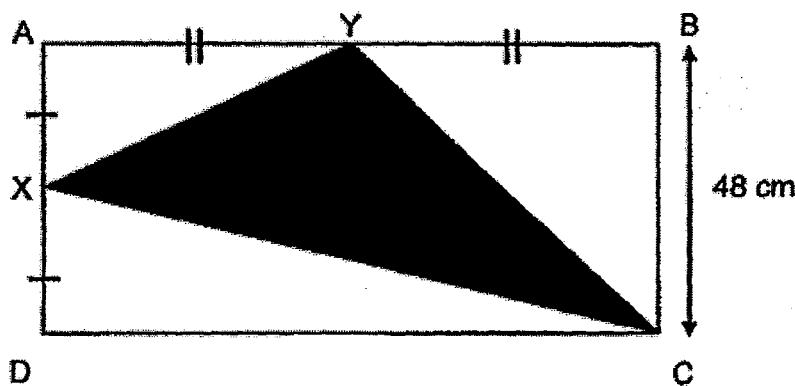
Painted Solid Figure

Ans: _____ [3]

12. Tony had \$522 more than Robert. After Tony spent $\frac{5}{7}$ of his money and Robert spent $\frac{1}{5}$ of his money, they had the same amount of money left.
How much did Tony have at first?

Ans: _____ [3]

13. ABCD is a rectangle. BC is 48 cm and AB is twice of BC.
Find the area of triangle CXY.



Ans: _____ [4]

14. Study the table below and answer the questions that follow.

Row	Numbers	Sum of each row
1	1	1
2	1 1	2
3	1 2 1	4
4	1 3 3 1	8
5	1 4 6 4 1	16
6	1 5 10 10 5 1	32
7	1 (i) (ii) 20 15 6 1	64

- a) What are the numbers represented by (i) and (ii)?
- b) Which row will have a sum of 1 024?

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

(ii) _____ [1]

(b) _____ [2]

15. Amy and Brian decided to buy a bag which cost \$945 for their mother.

They shared the cost of the bag in the ratio of 1 : 4.

(a) How much did Brian pay for the bag?

(b) Cathy wanted to share the cost of the bag too. The three of them decided to share the cost of the bag equally. How much should Cathy pay Brian?

Ans : (a) _____ [2]

(b) _____ [3]

16. Tammy wanted to buy some cookies and brownies. The cost of a cookie was $\frac{3}{4}$ the cost of a brownie. A set of 3 cookies and 2 brownies cost \$5.10. What was the total amount Tammy had to pay for 17 cookies and 10 brownies?

Ans: _____ [4]

17. The ticket price for 4 adults and 3 children for a concert is \$136. The ticket price for 6 adults and 6 children is \$222.

a) Find the cost of an adult ticket.

b) Miss Tan wants to bring her class of 40 Primary 3 pupils to the concert.

For every 15 pupils, there must be 1 accompanying teacher. What is the minimum cost she needs to pay altogether?

Ans : (a) _____ [2]

(b) _____ [3]

18. Mike, Nathan and Owen each had some marbles and decided to play a game with their marbles.

In round 1, Mike lost $\frac{1}{2}$ of his marbles to Nathan.

In round 2, Nathan lost $\frac{1}{2}$ of his total number of marbles to Owen.

In round 3, Owen lost $\frac{1}{2}$ of his total number of marbles to Mike.

In the end, Mike, Nathan and Owen had 124, 88 and 68 marbles respectively.

How many marbles did Nathan have at first?

Ans : _____ [5]

End of Paper
Please check your work carefully ☺

Sellers: Ms Tan Y. T.
Ms Teo S. H.
Mrs J. Seto

ANSWER SHEET

EXAM PAPER 2016 (P5)

SCHOOL : RAFFLES GIRLS'

SUBJECT : MATHEMATICS

TERM : SA1

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

16)43992

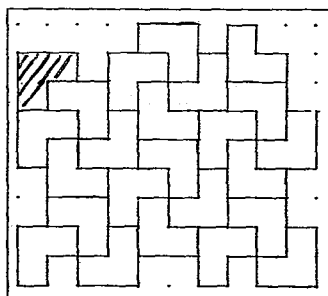
17)1850

18)85cm²

19)

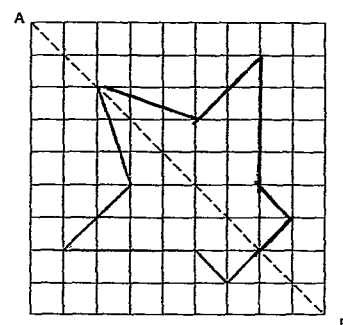
20)

20. Shade the unit shape that is incorrectly tessellated in the figure below.



Page 9 of 14

19. Given that AB is a line of symmetry, complete the figure below.



21)1/18kg

22)0.625

23)243

24)64.26

25)3:7

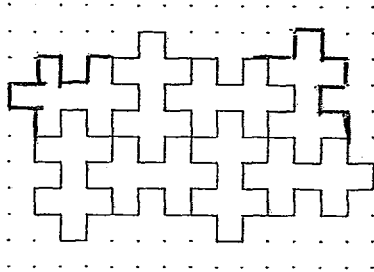
26)690km

27)38

28)576cm³

29)132

30. Extend the tessellation by drawing 2 more unit shapes.



Paper 2

1) $\frac{5}{8} \times 48/1 = 30$ boys

2) $12 \div 4 = 3$

$12 \div 6 = 2$

Ans: 12

3) $\frac{1}{3} \times 1272/1 = 424$ (Bala)

$\frac{1}{4} \times 1272/1 = 318$ (Catherine)

$424 + 318 = 742$

4) shaded area $\rightarrow 13 + 1 = 14$

$14 - 4 = 10$

Unshaded area $\rightarrow 4 - 1 = 3$

S : U

10: 3

5) $\frac{1}{2} \times 17 \times 4 = 34\text{cm}^2$

6) $42 \times 25 \times 28 = 29400$

$29400 - 10080 = 19320\text{ml}$

7) $5u + 6u = 11u$

$11u \rightarrow 385$

$1u \rightarrow 385 \div 11 = 35$

$4u \rightarrow 35 \times 4 = 140$ blue beads

8) $29 + 42 + 124 + 42 = 237$

$3u \rightarrow 237$

$1u \rightarrow 237 \div 3 = 79$

$79 + 29 + 42 = \$150$

9) $121 = 11 \times 11$

$10 + 11 = 21$

$26 - 21 = 5$

$\frac{1}{2} \times 11 \times 11 = 60.5$

$\frac{1}{2} \times 26 \times 5 = 65$

$65 + 60.5 = 125.5\text{cm}^2$

10) $14 \times 0.20 = 2.80$

$20.30 - 2.80 = 17.5$

$0.20 + 0.50 = 0.70$

$17.5 \div 0.70 = 25$

$25 + 14 = 39$

11) $1r \rightarrow 60 \times 20 = 1200$

$8r \rightarrow 1200 \times 8 = 9600$ (painted red)

$1s \rightarrow 3600$

$6s \rightarrow 3600 \times 6 = 21600$ (painted red)

$9600 + 21600 = 31200\text{cm}^2$

12) $14 - 5 = 9$

$9u \rightarrow 522$

$1u \rightarrow 522 \div 9 = 58$

$14u \rightarrow 58 \times 14 = \812

13) $\frac{1}{2} \times 48 \times 24 = 576$

$\frac{1}{2} \times 48 \times 48 = 1152$

$\frac{1}{2} \times 96 \times 24 = 1152$

Total area of rectangle $\rightarrow 48 \times 96 = 4608$

Total area of unshaded parts $\rightarrow 576 + 1152 + 1152 = 2880$

Triangle CXY $\rightarrow 4608 - 2880 = 1728 \text{cm}^2$

14)a) $1 + 20 + 15 + 6 + 1 = 43$

$64 - 43 = 21$

$21 - 6 = 15$

b) $1024 \div 2 = 512$

$512 \div 2 = 256$

$256 \div 2 = 128$

$128 \div 2 = 64$

$10 + 1 = 11$

15)a) $1u + 4u = 5u$

$5u \rightarrow 945$

$1u \rightarrow 945 \div 5 = 189$

$4u \rightarrow 189 \times 4 = \756

15)b) $3u \rightarrow 945$

$1u \rightarrow 94 \div 3 = 315$

Amy to Brian $\rightarrow 135 - 189 = 126$

Cathy to pay Brian $\rightarrow 756 - 315 - 126 = \315

16) $4u \times 2 = 8u$

$3u \times 3 = 9u$

$8u + 9u = 17u$

$17u \rightarrow 5.10$

$1u \rightarrow 5.10 \div 17 = 0.3$

$4u \times 10 = 40u$

$3u \times 17 = 51u$

$40u + 51u = 91u$

$91u \rightarrow 0.3 \times 91 = \27.3

17)a) $4A + 3C = 136 \rightarrow 28A + 6C = 272$

$6A + 6C = 222$

$2A = 50$

$1A = 50 \div 2 = 25$

$4A = 25 \times 4 = 100$

$3C = 136 - 100 = 36$

$1C = 36 \div 3 = 12$

17)b) $40 \div 15 = 2R10$

$40 \times 12 = 480$ (child tickets price)

$2 + 1 = 3$ (2 accompanying
teacher + Miss Tan)

$3 \times 25 = 75$ (adult tickets price)

$480 + 75 = \$555$

18) 120

