RAFFLES GIRLS' PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 1
MATHEMATICS (PAPER 1)
PRIMARY 5

Name: _____ (   )

Form Class: P5 _____   Math Teacher : _____

Date: 8 May 2017   Duration: 1 hour

Your Paper 1 Score (Out of 45 marks)	
Your Paper 2 Score (Out of 55 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. 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 your answer (**1, 2, 3 or 4**) on the OAS provided. All diagrams are not drawn to scale.
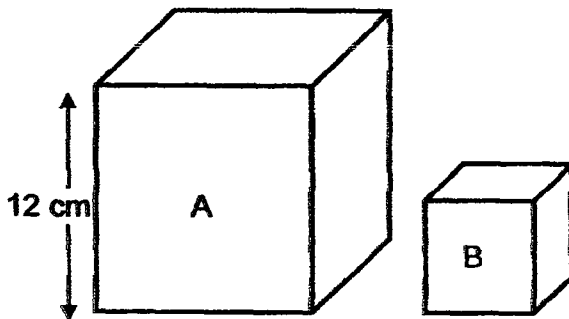
1. There were a total of 517 198 visitors to Alive Museum this year. Express this number to the nearest hundred.

   (1) 510 000

   (2) 517 100

   (3) 517 200

   (4) 518 000

2. 1040 x 200 = 104 x _____ x 20

   (1) 10

   (2) 100

   (3) 1000

   (4) 10 000

3. The height of cube B is half the height of cube A. Find the volume of cube B.

   (1) 108 cm^3

   (2) 216 cm^3

   (3) 864 cm^3

   (4) 1728 cm^3

4. What is the missing number in the box below?
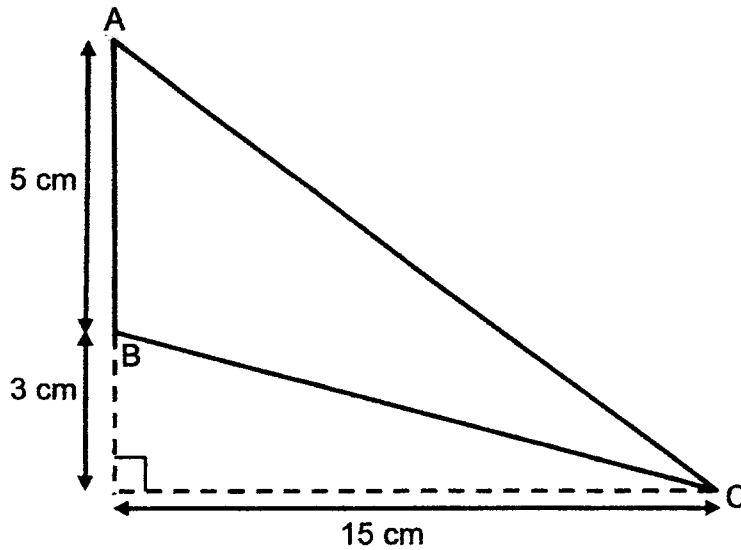
$$\frac{\square}{12} = \frac{6}{9}$$

   (1) 8

   (2) 9

   (3) 11

   (4) 18

5. Express $6\frac{7}{8}$ as an improper fraction.

   (1) $\frac{42}{8}$

   (2) $\frac{48}{8}$

   (3) $\frac{50}{8}$

   (4) $\frac{55}{8}$

6. Find the area of the triangle ABC.

(1) 22.5 cm²

(2) 37.5 cm²

(3) 60 cm²

(4) 75 cm²

7. 2 hundreds, 9 tenths and 7 thousandths is the same as _____.

(1) 200.907

(2) 200.97

(3) 290.07

(4) 290.007

8. Express 15.25 as a mixed number in its simplest form.

(1) $15\dfrac{25}{100}$

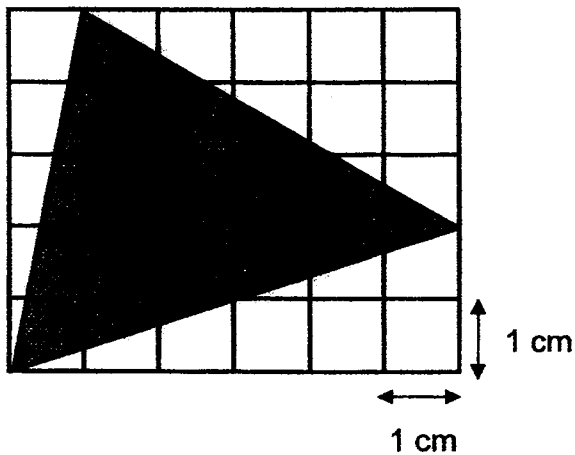(2) $15\dfrac{1}{25}$

(3) $15\dfrac{2}{5}$

(4) $15\dfrac{1}{4}$

9. In a kitchen, the ratio of the number of bowls to the number of plates is 2 : 3. There are 60 plates. How many bowls are there?

(1) 20

(2) 24

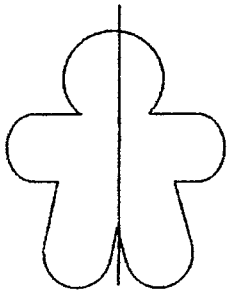(3) 30

(4) 40

10. What is the value of digit 7 in 287 020?

(1) 70

(2) 700

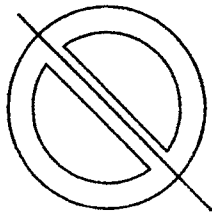(3) 7000

(4) 70 000

11. Find the area of the shaded triangle.

1 cm

1 cm

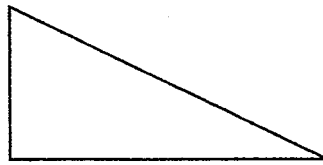(1) 12 cm²

(2) 14 cm²

(3) 16 cm²

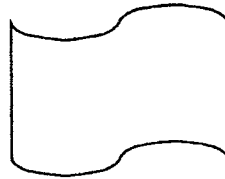(4) 18 cm²

12. Which of the following are symmetric figures?

A   B   C   D

(1) A and B

(2) A and D

(3) B and C

(4) C and D

13. Study the pattern of the letters below.

Column	1	...	24	25	26	27	28	29	30	31	32	...
Row 1	B	...	A	B	C	A	B	C	A	B	C	...
Row 2	P	...	S	P	Q	R	S	P	Q	R	S	...

Letters A and S appear at column 24. What is the next column that Letters A and S will appear together?

(1) 33

(2) 36

(3) 40

(4) 48

14. The 8-cm cubical container has some identical 1-cm solid cubes.
    What is the volume of the empty space left in the container?

8 cm
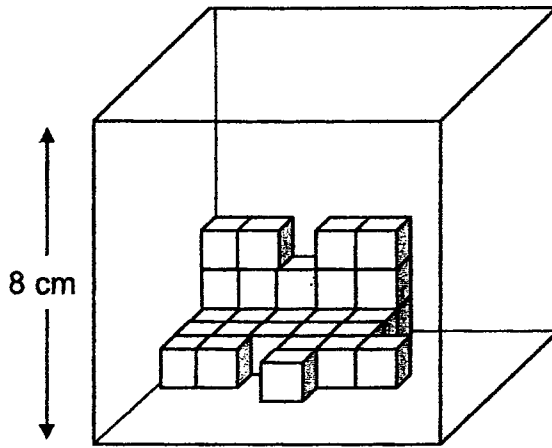
(1) 30 cm³

(2) 34 cm³

(3) 482 cm³

(4) 487 cm³

15. There were some balloons in the hall. $\frac{5}{8}$ of them burst. There were 60 balloons left. How many balloons burst?

(1) 36

(2) 96

(3) 100

(4) 160

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. All diagrams are not drawn to scale. Answers in fractions or ratio must be expressed in the simplest form.

16.   Arrange the following numbers in increasing order.

10 832, 18 230 , 10 823, 18 302

Ans: _____ , _____ , _____ , _____

17.   In 630.481, the digit in the hundredths place is _____ .

Ans: _____

18.   The diagram below shows a cuboid.
       Find the volume of the cuboid, given that its height is 12 cm.

12 cm

6 cm

7cm
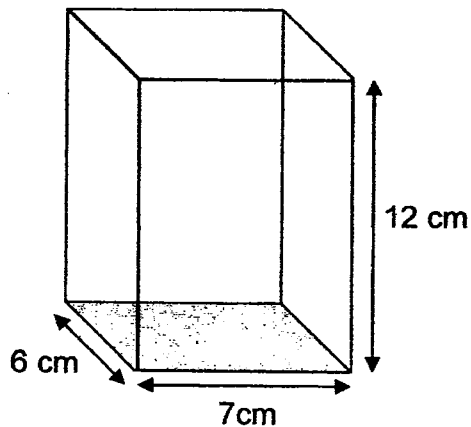
Ans: _____ cm^3

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

A

B

20. Find the value of $\dfrac{5}{6} \times \dfrac{9}{10}$.

Ans: _____

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 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.
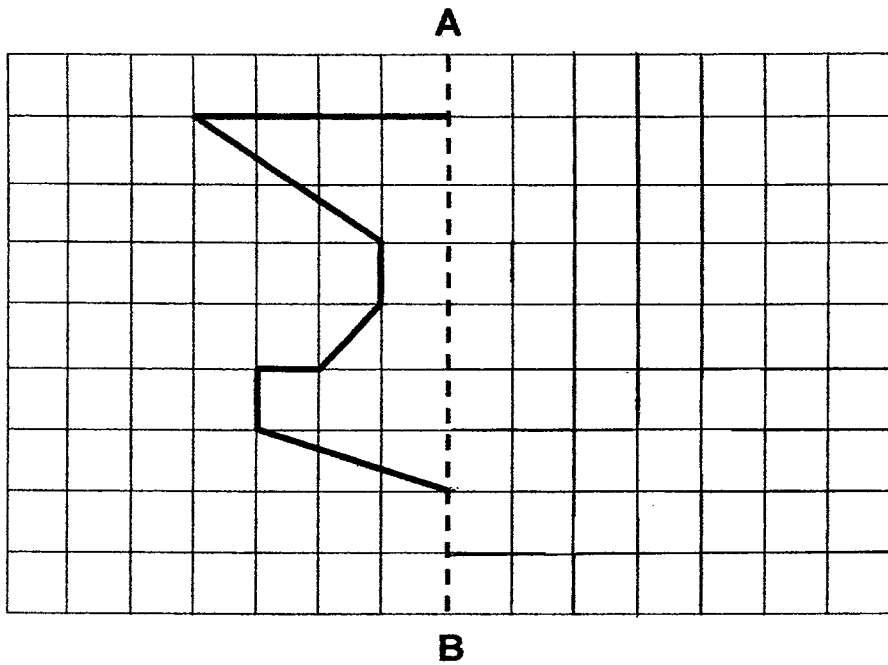
21. Yuki jogged 20 km on Monday. The distance she jogged on Tuesday was $\frac{3}{8}$ the distance she jogged on Monday. What was the difference between the distance she jogged on Monday and Tuesday?

Ans: _____ km

22. An empty bookshelf weighs $10\frac{1}{2}$ kg. After placing some books on the bookshelf, it weighs $13\frac{3}{4}$ kg. Find the mass of the books.

Express your answer in decimal.

Ans: _____ kg

23. 5 notebooks are sold for $2.70. How much would 20 such notebooks cost?

Ans: $_____

24. Find the value of $20\frac{1}{8}$ + 4.16 + 45.
Round your answer to 1 decimal place.

Ans: _____

25. At a concert, $\frac{9}{20}$ of the audience are adults, $\frac{1}{4}$ of the audience are boys and the rest are girls. What is the ratio of the number of girls to the number of boys at the concert?

Ans: _____

26. Ali puts some 50-cent and 20-cent coins in a box. There are 72 more 20-cent coins than 50-cent coins in the box. The total value of 50-cent coins is $12 more than the total value of 20-cent coins.
What is the number of 50-cent coins in the box?

Ans: _____

27.　312 x 10 + (2496 ÷ 8) x (35 – 5) = _____

Ans: _____

28.　The height of a square-based cuboid is $\frac{2}{3}$ of its breadth. The cuboid has a

base area of 144 cm². Find the volume of the cuboid.

Ans: _____ cm³

29. The diagram below shows cuboid P and cuboid Q with identical base area.

The capacity of cuboid P is 2 times the capacity of cuboid Q.

Find the volume of cuboid Q.

Cuboid P   Cuboid Q
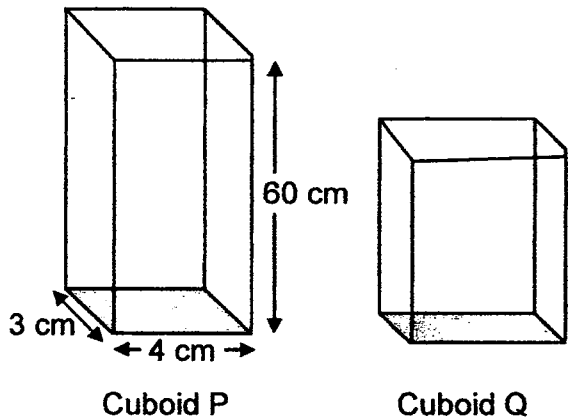
Ans: _____ cm³

30. There are some adults and children at a fun fair. $\frac{3}{5}$ of them are children.

$\frac{1}{5}$ of them are women. There are more boys than girls.

Based on the information above, put a tick in the correct box.

	True	False	Impossible to tell
a) There is an equal number of men and women			
b) There are more girls than men.			

End of Paper
☺ **Please check your work carefully** ☺

Setters: Eliza Tang
        Darren Lau
        Kim Ang

SEMESTRAL ASSESSMENT 1
MATHEMATICS (PAPER 2)
PRIMARY 5

Name: _____ (   )

Form class: P5 _____   Math Teacher : _____

Date: 8 May 2017   Duration: 1 h 30 min

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.
Answers in fractions or ratio must be expressed in the simplest form.   (10 marks)

1. Mr Wong bought $4\dfrac{8}{9}$ kg of sugar. He used $\dfrac{1}{4}$ of the sugar to bake some cakes. How much sugar was left?

   Ans : _____ kg [2]

2. In 2016, Mrs Lee's age was a multiple of 7 while Mrs Tan's age was a multiple of 12. Each of their ages was below 100 years and the difference in their ages was 28 years. What was Mrs Lee's age in 2016?

   Ans : _____ [2]

3. Fill in the missing number in the number pattern below.

$$1\frac{1}{4} \ , \ 1\frac{3}{8} \ , \ \underline{\quad\quad} \ , \ 2 \ , \ 2.5 \ , \ 3\frac{1}{8}$$
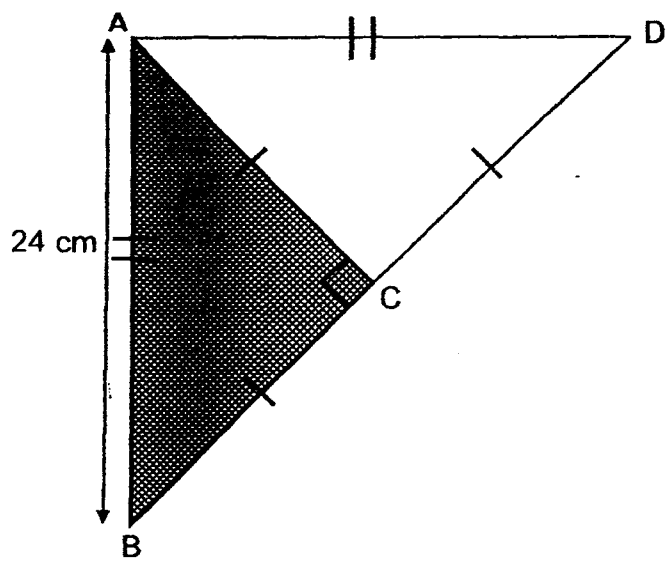
Ans : _____ [2]

4. Jane is $\frac{1}{4}$ as tall as Ben. The ratio of Ben's height to Li Zhen's height is 5 : 3.

What is the ratio of Jane's height to Ben's height to Li Zhen's height?

Ans : _____ [2]

5.   BCD is a straight line. Find the area of the shaded triangle ABC.

Ans: _____ cm² [2]

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 the brackets [   ] at the end of each question or part-question.
Figures are not drawn to scale.
Answers in fractions or ratio must be expressed in the simplest form.   (45 marks)

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6. In the figure below, $\frac{3}{7}$ of the tank is filled with some water. How much more water is needed to fill the tank to its brim? Express your answer in litres.

56 cm

105 cm

1 m 42 cm
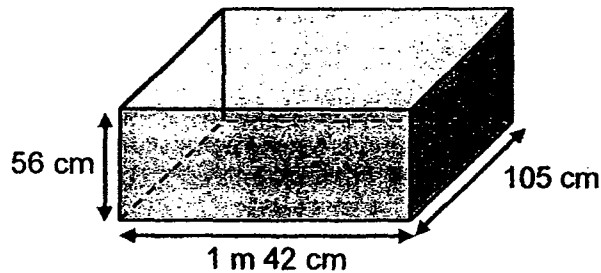
Ans : _____ [3]

7.   The figure below shows a rectangle ABCD. The ratio of AB to BC is 3 : 2. AB is 90 cm. What is the perimeter of rectangle ABCD?
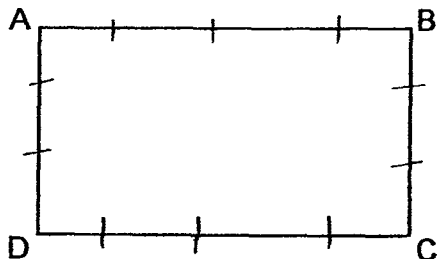
Ans: _____ [3]

8. At a shop, 5 m of ribbon was sold at $7.20. Mrs Robinson bought 10 m of ribbon and had $18 left. If she wanted to buy 30 m of ribbon, how much more money would she need?

Ans : _____ [4]

9. Ali had 252 oranges and some apples. He used $\frac{3}{4}$ of his oranges to make orange juice. The ratio of the number of oranges to the number of apples was 7 : 13 in the end.

a) How many apples did Ali have at first?

b) What was the ratio of the number of oranges to the number of apples at first? Give your answer in the simplest form.

Ans : a) _____ [3]

b) _____ [1]

10. Tank A and Tank B had 10.8 m³ of water. After 1.045 m³ of water was poured from Tank A to B, Tank A had three times as much water as Tank B. How much water was in Tank A at first?
(Round your answer to 1 decimal place)

Ans: _____ . [3]

11. Jason has a collection of 200 toy vehicles. $\frac{1}{4}$ of them are buses. $\frac{1}{6}$ of the remainder are trucks. The rest of them are cars. How many cars are there?
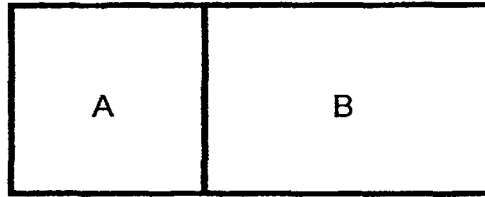
Ans: _____ [3]

12. Devi had $\frac{5}{7}$ as many books as Sarah. Sarah had $\frac{7}{8}$ as many books as Hamidah. After Devi and Hamidah gave a total of 85 books to Sarah, Sarah had 3 times as many books as Devi. Hamidah then had as many books as Devi.

a) What was the ratio of the number of books Devi had to the number of books Sarah had to the number of books Hamidah had in the beginning?
Give your answer in the simplest form.

b) How many books did Sarah have in the end?

Ans: a) _____ [1]

b) _____ [3]

13. In the figure, PQRS is a rectangle. SR = 28 cm. PS = 6 cm. The area of triangle PTU is 12 cm². PT = VW. The length of TU is half of UV. Find the area of the unshaded parts.

P | T | Q

6 cm

S | V | W | R

28 cm

Ans: _____ [4]

14. The figure below is made up of square A and rectangle B. The length of rectangle B is 3 cm longer than its breadth. The area of the figure is 90cm² Find the perimeter of the figure.

Ans: _____ [4]

15. The figure below is formed with three squares. What is the area of the 4 shaded triangles?

10 cm
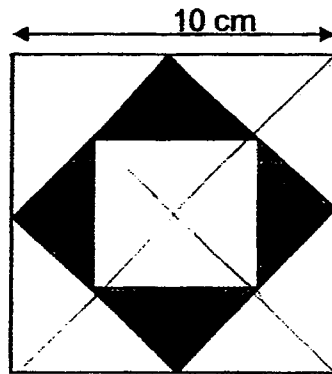
Ans: _____ [3]

16. Mr Tan collected $18 760 after selling some chairs and tables. He sold 4 times as many chairs as tables. He collected $7672 more for the chairs than the tables. Each table cost $80 more than a chair. Find the price of the table.

Ans : _____ [5]

17. Kim Hui had $158 more than Dinesh. At a furniture mall, Kim Hui bought 2 chairs and 5 stools while Dinesh bought 3 chairs and 2 stools. Each chair that they bought cost 3 times as much as a stool.

(a) After buying the chairs and stools, did the difference between the amount of money Kim Hui and Dinesh had left increase, decrease or remain the same?

(b) Kim Hui had $455 at first. The amount of money Dinesh had at first was 3 times as much as what he had left in the end. Find the price of a chair.

Ans: (a) _____ [1]

(b) _____ [4]

End of Paper
Please check your work carefully ☺

School: Raffles
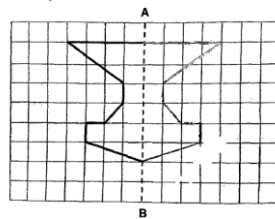Level: P5
Subject: Maths
Term: SA1
Year: 2017

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

Q16)
10823, 10832,
18230, 18302

Q17) 8

Q18) 6 x 7 x 12
= 504

Q19)

Q20) $\frac{3}{4}$

Q21) 12.5

Q22) 3.25

Q23) $10.80

Q24) 69.3

Q25) girl:boy
6 : 5

Q26) 88

Q27) 12480

Q28) 1152

Q29) 360

Q30) a) True
b) not given

Paper 2

Q1) $1 - \frac{1}{4} = \frac{3}{4}$

$4\frac{8}{9} = \frac{44}{9}$

$\frac{3}{4} \times \frac{44}{9} = \frac{132}{36} = 3\frac{2}{3}$

Q2) 56 years old

Q3) $1\frac{5}{8}$

Q4) 5 : 20 : 12

Q5) 0.5 x 24 x 24 = 288 ÷ 2 = 144

Q6) 56 x 105 x 142 = 834960
834960 ÷ 7 x 4 = 477120
477120 cm^3 = 477120 mℓ = 477.12mℓ

Q7) 90 ÷ 3 x 10 = 300

Q8) $10 \div 5 = 2$
$7.20 \times 2 = \$14.40$
$14.40 + \$18 = \$32.40$
$30 \div 5 = 6$
$7.20 \times 6 = \$43.20$
$43.20 - \$32.40 = \$10.80$

Q9) a) $252 \div 4 = 63$
$63 \div 7 = 9$
$9 \times 13 = 117$
b) $252 : 117 = 28 : 13$

Q10) $10.8 \div 4 = 2.7$
$2.7 \times 3 = 8.1$
$8.1 + 1.045 = 9.145 \approx 9.1 \text{ m}^3$

Q11) $\dfrac{3}{4} \times \dfrac{5}{6} \times 200 = 125$

Q12) a) Devi : Sarah : Hamidah = 5 : 7 : 8
b) $5u = 85$
$1u = 85 \div 5 = 17$
$12u = 17 \times 12 = 204$

Q13) TU $\rightarrow 6 \div 3 = 2$
PT $\rightarrow 12 \times 2 \div 2 = 12$
UV $\rightarrow 2 \times 2 = 4$
UVW $\rightarrow \dfrac{1}{2} \times 4 \times 12 = 24$

$6 \times 28 = 168$
$24 + 12 = 36$
$168 - 36 = 132$

Q14) Length of B = 9
Length of A = 6
Height of A and B = 6
$6 + 6 + 6 + 9 + 9 + 6 = 42$ cm

Q15) $10 \times 10 = 100$
$100 \div 16 = 6.25$
$6.25 \times 4 = 25 \text{ cm}^3$

Q16) $(18760 - 7672) \div 2 = 5544$ (tables)
$5544 + 7672 = 13216$ (chairs)
1u of tables $\rightarrow 5544$
1u of chairs $\rightarrow 13216 \div 4 = 3304$
Diff of 1 item $\rightarrow \$80$
Diff of 1u of items $\rightarrow \$5544 - \$3304 = \$2240$
Number of itmes in 1u $\rightarrow \$2240 \div \$80 = 28$
$5544 \div 28 = \$198$

Q17) a)   Remains the same
     b)   455 – 158 = 297
           297 ÷ 3 = 99
           99 x 2 = 198
           198 ÷ 11 = 18
           18 x 3 = 54

                        End