RAFFLES GIRLS' PRIMARY SCHOOL

SEMESTRAL ASSESSMENT 1

MATHEMATICS (PAPER 1)

PRIMARY 5

Name: _____ ( )

Form Class: P5_____ Math Teacher: _____

Date: 11 May 2015 Duration: 50 min

Your Score (Out of 100 marks)	
Your Score (Out of 40 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.

SECTION A (20 marks)

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. In 320 179, the digit 2 is in the _____ place.

   (1) hundreds

   (2) thousands

   (3) ten thousands

   (4) hundred thousands

2. 1977 46 = 1977 x 12 + _____ x 1977

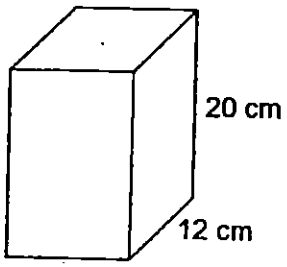
   (1) 28

   (2) 34

   (3) 46

   (4) 58

3. What is the volume of the cuboid shown below?



   (1) 140 cm^3

   (2) 240 cm^3

   (3) 1 400 cm^3

   (4) 2 400 cm^3

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

$$\frac{\square}{12} = \frac{6}{18}$$

(1) 8

(2) 2

(3) 3

(4) 4

5. Express $\frac{47}{9}$ as a mixed number.

(1) $2\frac{5}{9}$

(2) $4\frac{7}{9}$

(3) $5\frac{2}{9}$

(4) $9\frac{2}{5}$

6. Which of the following shapes cannot be tessellated?

(1) 

(2) 

(3) 

(4) 

7. In 279.534, what does the digit 5 stand for?

(1) 5 tens

(2) 5 tenths

(3) 5 hundreds

(4) 5 hundredths

8. Express 2.25 as a fraction.

(1) $2\frac{2}{25}$

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

(3) $2\frac{1}{4}$

(4) $2\frac{1}{2}$

9. Which of the following ratio is equivalent to 18 : 12?

(1) 2 : 3

(2) 4 : 6

(3) 15 : 10

(4) 21 : 10

10. The mass of a bag of flour when rounded off to the nearest kilogram is 3 kg.

Which of the following could be the actual mass of the bag of flour?

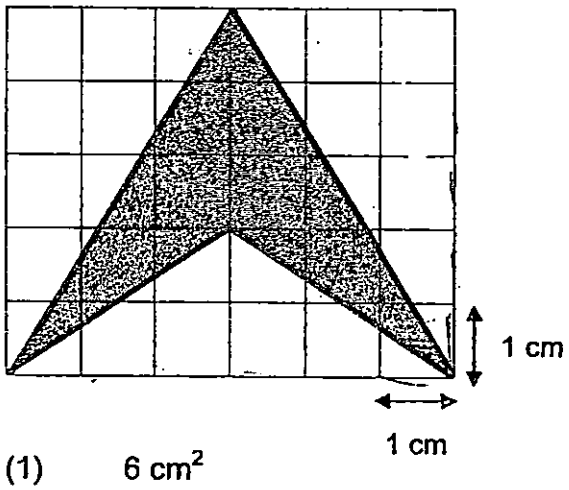
(1) 2 kg 109 g

(2) 2 kg 450 g

(3) 3 kg 200 g

(4) 3 kg 800 g

11. What is the total shaded area in the figure below?



(1) 6 cm^2

(2) 9 cm^2

(3) 10 cm^2

(4) 15 cm^2

12. Which one of the following has a line of symmetry?

ILL MON TAT WOO

(1) ILL

(2) MON

(3) TAT

(4) WOO

13. What is the sum of all the common factors of 48 and 60?

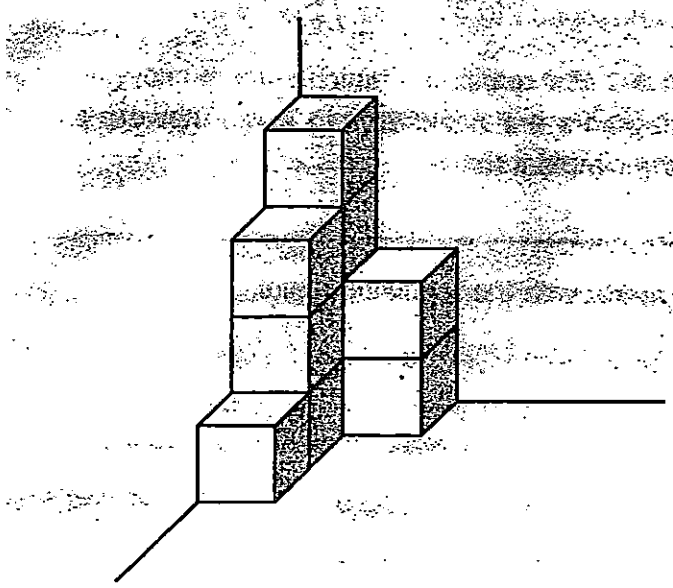
(1) 12

(2) 16

(3) 28

(4) 108

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



(1) 8 cm^3

(2) 9 cm^3

(3) 10 cm^3

(4) 11 cm^3

15. $\frac{3}{7}$ of ♣ is 252. What is the value of ♣ ?

(1) 36

(2) 84

(3) 108

(4) 588

SECTION B (20 marks)

Questions **16** to **25** carry 1 mark each. Questions 26 to 30 carry 2 marks 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. Form the smallest 5-digit odd number with the following digits.

    Do not start with 0.

    8, 2, 0, 1, 5

Ans: _____

17. In 682.759, the digit in the hundredths place is _____.

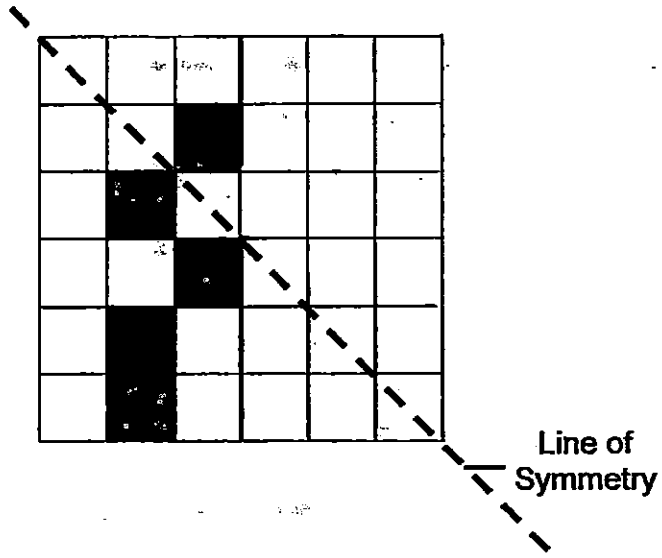
Ans: _____

18. The volume of the cube shown below is 216 cm^3.

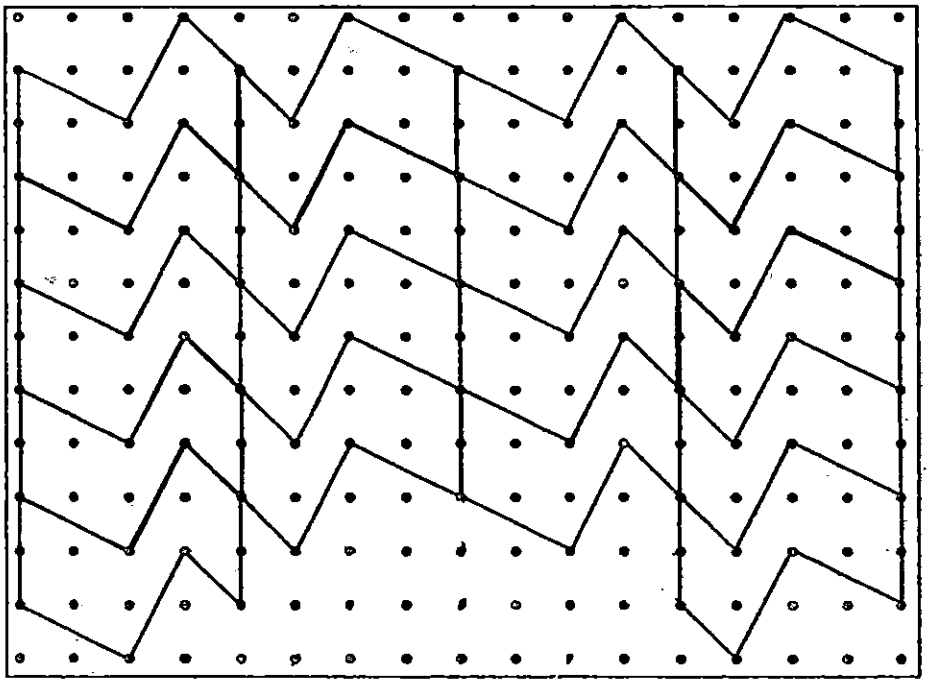
    What is the length of the cube?

Ans: _____ cm

19. Shade 2 squares to make the figure below symmetrical.



20 The pattern in the box below shows a part of a tessellation.
Extend the tessellation by drawing 2 more unit shapes within the box.



21. Mrs Tan had $\frac{1}{5}$ m of string. She used $\frac{1}{7}$ m of the string to make wrap a gift.

What was the length of string left?

Ans: _____

22. Express $5\frac{3}{25}$ as a decimal.

Ans: _____

23. Find the value of 37.248 ÷ 6.

Ans: _____

24. Round off 45.299 to the nearest whole number.

Ans: _____

25. Haris counts the marbles in a bag and records the number of marbles in the table below.

Colour of marbles	Number of marbles
Red	2
Green	8

What is the ratio of the total number of marbles to the number of green marbles?

Ans: _____

26. Ahmad had 2 boxes of pens. Each box contained 24 pens.

He shared his pens equally with his 2 brothers.

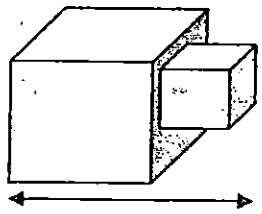
How many pens did each boy receive?

Ans: _____

27. Fill in the blanks with the correct symbols, **+** , **-** , **X** , **÷**.
Each symbol can only be used once.

12_____ 12 – 122 _____ 12 = 10

28. The figure below is made up of 1 big cube and 1 small cube. The ratio of the length of the big cube to the length of the small cube is 2 : 1.
Calculate the volume of the figure.

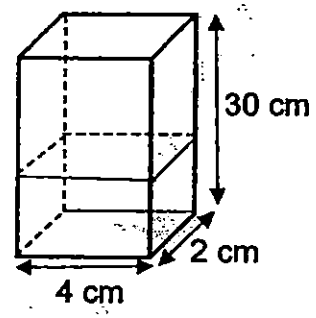


12 cm

Ans: _____ cm^3

29. Container A below contains water up to $\frac{2}{5}$ of its height. Its height is 30 cm.

Find the volume of water in container A.



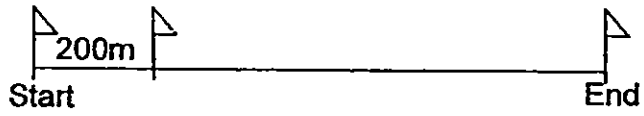
Container A

Ans:_____ cm^3

30. A flag is placed at the start of a 5-km charity run.

Thereafter, a flag is placed at every 200 m along the run.

How many flags are used altogether?



Ans: _____

RAFFLES GIRLS' PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 1
MATHEMATICS (PAPER 2)
PRIMARY 5

Name: _____ ( )

Form class: P5 _____ Math Teacher: _____

Date: 11 May 2015 Duration: 1 h 40 min

Your 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. Fatimah had 198 white marbles and 112 black marbles.
She gave away $\frac{1}{3}$ of the white marbles and $\frac{1}{7}$ of the black marbles.
How many marbles were given away?

Ans: _____ [2]

2. A machine is able to manufacture 3 toys in 21 minutes.
How long will it take for the machine to manufacture 15 toys?

Ans: _____ min [2]

3. Arrange the fractions below from the largest to the smallest.

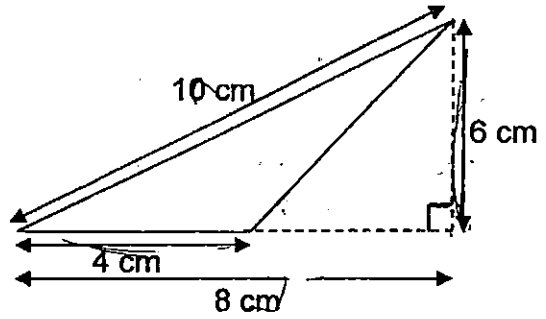
$\frac{2}{9}$, $\frac{3}{5}$, $\frac{7}{9}$, $\frac{8}{5}$

Ans: _____ [2]

4. John has two identical jugs, X and Y, filled with some orange juice.
The ratio of the amount of orange juice in Jug X and Y is 5: 7.
The amount of orange juice in Jug Y is 434 ml.
How much orange juice must John pour into Jug X so that Jug X and Y have an equal amount of orange juice?

Ans: _____ ml [2]

5. Find the area of the triangle shown below.



Ans: _____ cm^2 [2]

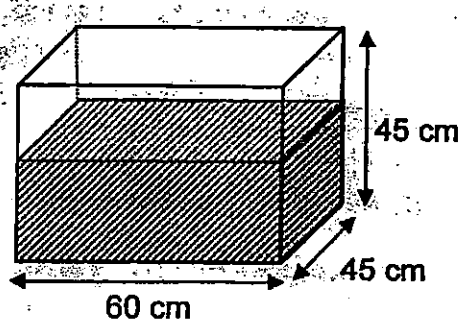
For questions **6** to **18**, show your working clearly in the space provided for each question and write your answers in the spaces provided. Figures are not drawn to scale. The number of marks available is shown in the brackets [ ] at the end of each question or part-question. (50 marks)

---

6. Mrs Tan had some muffins and cookies in the ratio of 1 : 3.
After she baked 100 more muffins, the ratio of the number of muffins to the number of cookies became 3 : 5.
What was the total number of muffins and cookies that Mrs Tan had at first?

Ans: _____ [3]

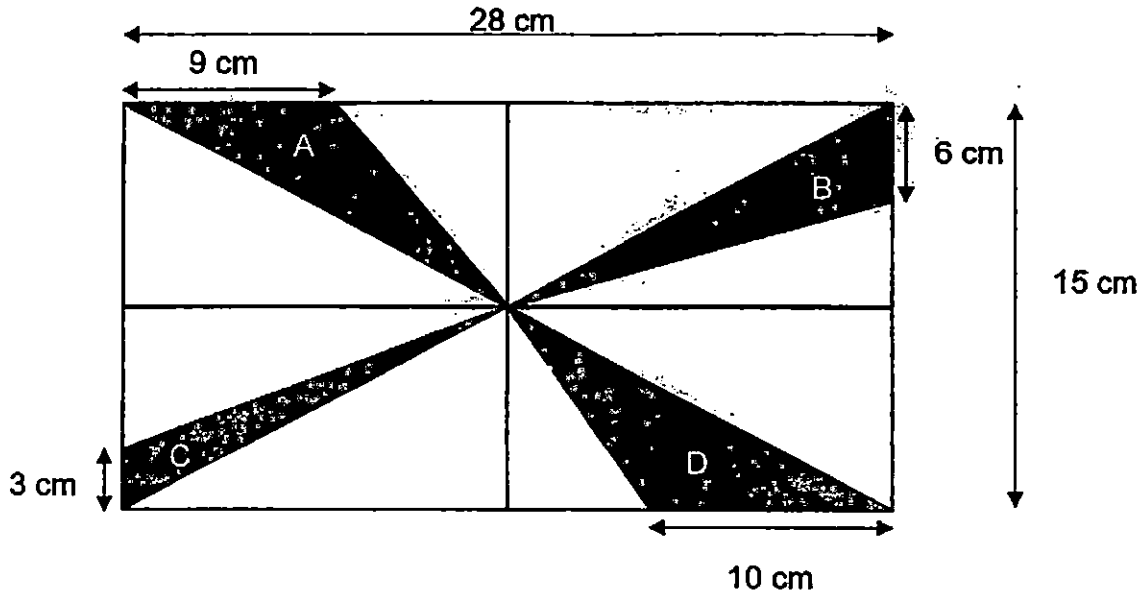
7. Tank A is $\frac{2}{3}$ filled with water. How many 15-cm cubes must be added to Tank A to fill it to its brim?



Tank A

Ans: _____ [3]

8. The figure below is made of 4 identical rectangles.
The length of the figure is 28 cm and its breadth is 15 cm.
Find the total area of the shaded parts.



Ans: _____ [3]

9. Janice could buy 65 identical books with all her money. If the price of each book was increased by $7, she would have to buy 35 fewer books.

How much money did Janice have?

Ans: _____ [4]

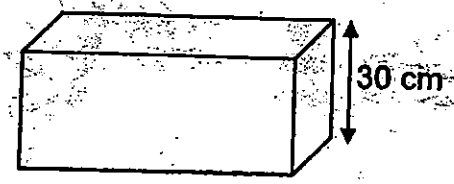
10. The cost of 17 erasers and 9 pens is $10.85.
The cost of 4 erasers and 8 pens is $5.20.

(a) What is the cost of 36 erasers and 72 pens?
(b) How many erasers can be bought with $40?

Ans: (a) _____ [2]

(b) _____ [2]

11. X is a rectangular tank with a base area of 200 cm^2.
The height of the tank is 30 cm.



Tank X

Water is poured into the tank until it fills up $\frac{3}{5}$ of the tank.

(a) How much water is in the tank now?

(b) Then, all the water from the tank is poured into cups of 300 ml without spilling.

How many cups are filled to the brim?

Ans: (a) _____ [2]

(b) _____ [2]

12. I am thinking of a fraction.

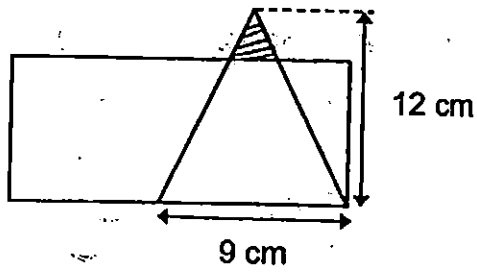
The difference between the numerator and the denominator is 23.

When 5 is added to the denominator, the fraction becomes $\frac{1}{5}$

What is the fraction?

Ans: _____ [3]

13. The figure below is made of a triangle and a rectangle.



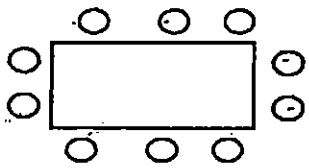
$\frac{1}{6}$ of the triangle is shaded. The shaded area of the triangle is $\frac{1}{12}$ of the area of the rectangle.

Find the area of the rectangle.

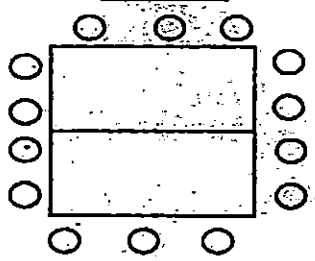
Ans: _____ [3]

14. Tables and chairs at a dinner party can be arranged in the patterns below.

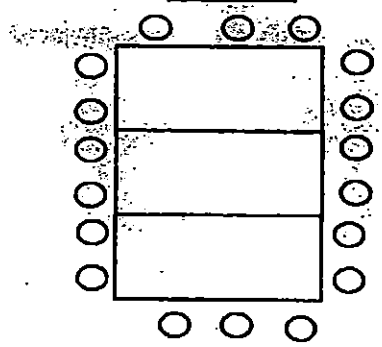
Pattern 1

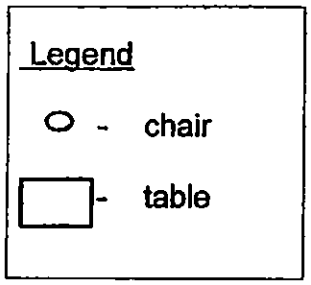


Pattern 2



Pattern 3





a) How many chairs will there be in Pattern 4?

b) Which pattern will have 102 chairs?

Ans : (a) _____ [2]

(b)_____ [2]

15. Mrs Bong bought some apples and oranges. The cost of an orange was $\frac{2}{3}$ the cost of an apple. She paid $9.60 for 8 apples and 12 oranges.

How much did an apple cost?

Ans : _____ [4]

16. Two siblings, Tom and Jerry, had a total of 590 game cards at first.

After Jerry bought 35 games cards and gave Tom 20 game cards, Jerry had 4 times as many game cards as Tom.

How many game cards did Jerry have at first?

Ans : _____ [5]

17 Anna collected sea shells and kept them in 3 boxes, A, B and C.

Box A contained $\frac{1}{4}$ as many sea shells as the total number of sea shells in boxes B and C.

Box B contained $\frac{2}{5}$ as many sea shells as the total number of sea shells in boxes A and C.

(a) Find the ratio of the number of seashells in box A to the number of seashells in box C.

(b) There are 96 more seashells in box C than box B.

How many seashells did Anna collect altogether?

Ans : a) _____ [2]

b) _____ [3]

18. This year, Ming Ming's age is $\frac{4}{5}$ of her brother's. Her brother will be 41 years old in 6 years' time.

How old was Ming Ming when she was 1 year younger than $\frac{3}{4}$ of her brother's age?

Ans : _____ [5]

End of Paper

Setters: Ms Tan Lizhen, Ms Melissa Yeo, Mdm Wirda Sukor

EXAM PAPER 2015
LEVEL : PRIMARY 5
SCHOOL : RAFFLES GIRLS' PRIMARY SCHOOL
SUBJECT : MATHEMATICS
TERM : SA1

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

Q16. 10 285 Q17. 5 Q18. 6cm→ Vol= LXBXH , 216 = 6x6x6

Q19. No model answer Q20. No model answer

Q21. $\frac{2}{25}$ - →⅕ − $\frac{1}{7}$ = $\frac{7}{35}$ - $\frac{5}{35}$ = $\frac{2}{35}$

Q22. 5.12 Q23. 6.208 Q24. 45

Q25. 5:4 →Total :Green , 10:8, 5:4

Q26. 16 →24 x 2 = 48, 48÷3=16

Q27. X , – → 12 x 12, 144 – 122

Q28. 576cm³
2u+1u=3u 12
1u 12÷3=4
2u 4 x 2 = 8
small cube 4 x 4 x 4 =64
big cube 8 x 8 x 8 = 512
64 +512= 576

Q29. 96cm³
Height of water ⅖ x 30 = 12
Volume of water 4 x2x12=96

Q30. 25→ 5km=5000m, No. of gaps 5000÷200=25, 25 + 1 = 26

Q1. 82 → 198 ÷3=66, 112÷ 7 = 16, 66 + 16 = 82

Q2. 105min→ 15÷3 =5, 21 x 5 =100 Q3. $\frac{8}{5}, \frac{7}{9}, \frac{3}{5}, \frac{2}{9}$

Q4. 124ml→ 434 ÷7 = 62 (1 unit), 62 x 2 = 124 Q5. 12cm² ½ x 4 x 6 = 12

Q6. 500 muffins & cookies→ 9 – 5 = 4, 100÷4=25, 5+15=20, 20 x 25 = 500

Q7. 12 →15 x 15 x 15 = 3375, 45÷3=15, 45 x 60 x 15=40500, 40500÷3375=12

½ x 18 x 7.5 = 67.5, ½x19x7.5=71.25, ½x9x14=63, ½x12x14=84, 84+63+71.25+67.5=285.75, 28 x 15 = 420, 420 – 285.75=134.25

Q9. $390 → 65 – 35=30, $7 x 30 =$210, $210÷35=46, $6x65 =$390

Q10a. $46.80→ 4÷36=9, $5.20X9 = $46.80

Q10b. 100 erasers →17e +9 pens = $10.85, 4e + 8 pens = $5.20,
36e+72pens →$46.80, 136e+72pens→ $86.80, 100e=$40

Q11a. 3600cm³→ 30÷5=6, 6 x 3 = 18, 18 x 200 = 3600 Q11b. 12 cups 3600÷300 = 12

Q12. $\frac{7}{30}$ → 23+5 =28 (4u) 28÷4=7, 7 + 23 = 30→ $\frac{7}{30}$

Q13. 108cm² →½ x 9 x 12 = 54, 54÷6= 9, 9 x 12 = 108

Q14a. 22 chairs →18 + 4 = 22 Q14b. pattern 24 102 – 6 -96 , 96 ÷ 4 = 24

Q15. $0.60→ 8 x 3 = 24, 12 x 2 = 24, 48u $9.60, 1u $0.20, 3 x 20¢=60¢

Q16. 485 game cards →590÷35=625, 625÷5=125, 4 x 125=500, 500+20-35=485

Q17a. 7:18
Q17b. 8u →96,1u→ 12, 7 + 28=35 (altogether), 35 x 12 =420

Q18. 17 years old → 41-6 = 35, 35÷5=7, 7-1=6, 3 x 6 = 18, 18-1=17