Rosyth School
Second Semestral Assessment 2012
Primary 5 Mathematics

Name: _____ Register No. _____

Class: Pr 5 - _____

Date: 29 October 2012 Parent's Signature: _____

Total Time for Booklets A and B : 50 minutes

PAPER 1
(Booklet A)

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. Shade your answers in the Optical Answer Sheet (OAS) provided.
4. You are **not** allowed to use a calculator
5. Answer all questions.

Section	Maximum Mark	Marks Obtained
Paper 1 (Booklet A)	20	

* This booklet consists of 6 pages (excluding this cover page)

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. Which of the following is eight million, thirty-eight thousand, three hundred and eighteen?

   (1) 8 038 318

   (2) 8 083 318

   (3) 8 380 318

   (4) 8 383 018

2. The value of 50 tens, 5 tenths and 5 thousandths is _____.

   (1) 50.055

   (2) 50.505

   (3) 500.055

   (4) 500.505

3. $\frac{2}{5} \div 3$ has the same value as _____.

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

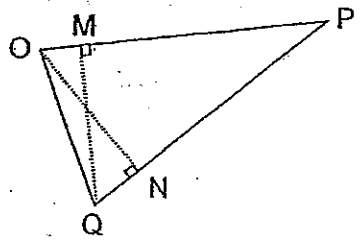
   (2) $\frac{5}{2} \times 3$

   (3) $\frac{2}{5} \times \frac{1}{3}$

   (4) $\frac{5}{2} \times \frac{1}{3}$

(Go on to the next page)

4. In the triangle OPQ below, name the base that corresponds to the height ON. (The figure is not drawn to scale.)



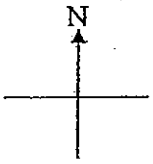
(1) PQ

(2) PN

(3) OP

(4) OQ

5. After turning 45° clockwise, Wei Qiang is facing north now. Which direction was he facing at first?



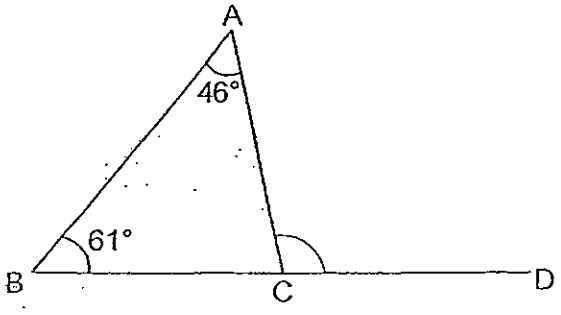
(1) West

(2) East

(3) North-East

(4) North-West

6. The figure below is not drawn to scale. BCD is a straight line. Find ∠ACD.



(1) 73°

(2) 107°

(3) 119°

(4) 134°

(Go on to the next page)

7. $\frac{7}{10}$ of a number is 210. What is $\frac{3}{4}$ of the number?

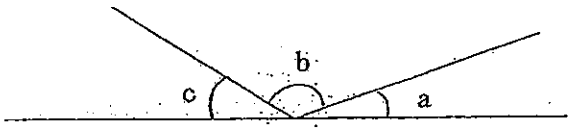
(1) 30

(2) 75

(3) 225

(4) 300

8. The figure below is not drawn to scale. $\angle b$ is 3 times of $\angle a$ and $\angle c$ is twice of $\angle a$. Find $\angle a$.



(1) 30°

(2) 60°

(3) 90°

(4) 150°

9. The ratio of the number of red apples to the number of green apples in a basket was 2 : 5. There were 63 red and green apples altogether. How many green apples were there in the basket?

(1) 9

(2) 18

(3) 35

(4) 45

(Go on to the next page)

10. The average mass of Box A, Box B and Box C is 35 kg.
The average mass of Box A and Box C is 43 kg. What is the mass of Box B?

(1) 8 kg

(2) 19 kg

~~(4)~~ 3 27 kg

~~(3)~~ 4 62 kg

11. The figures below are made up of 1-cm cubes

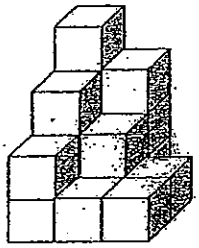


Figure A

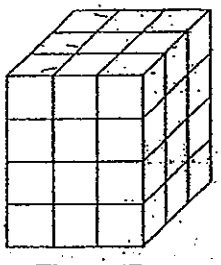


Figure B

How many 1-cm cubes must be added to Figure A to make Figure B?

(1) 15

(2) 17

(3) 19

(4) 21

12. There are 49 pupils in a school library. $\frac{5}{7}$ of the pupils are girls. How many more girls than boys are there?

(1) 14

(2) 21

(3) 28

(4) 35

(Go on to the next page)

9.

13. Reliable Car Rental charges the following rates for the rental of a car.

Monday – Friday	: $ 45 per day
Saturday – Sunday	: $ 60 per day

Mr Raju rented a car from Tuesday to Sunday. How much must he pay for the rental of the car?

(1) $ 120

(2) $ 180

(3) $ 300

(4) $ 330

14. 20% of the 400 fruits in a crate are apples. 100 more apples are added to the crate. What percentage of the fruits in the crate are apples?

(1) 16%

(2) 25%

(3) 30%

(4) 36%

(Go on to the next page)

15. The number of twenty-cent coins that Sujata has is twice the number of ten-cent coins. The total value of all the coins is $12. How many twenty-cent coins does she have?

(1) 24

(2) 30

(3) 48

(4) 60

(Go on to Booklet B)

Rosyth School
Second Semestral Assessment 2012
Primary 5 Mathematics

Name: _____ Register No. _____

Class: Pr 5 - _____

Date: 29 October 2012 Parent's Signature: _____

Total Time for Booklets A and B : 50 minutes

PAPER 1
(Booklet B)

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. You are **not** allowed to use a calculator
4. Answer all questions.

Section	Maximum Mark	Marks Obtained
Paper 1 (Booklet B)	20	

*** This booklet consists of 7 pages (excluding this cover page)**

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)

Do not wr in this spa

16. Find the missing number in the following number pattern:

58 860, 60 060, _____, 62 460, 63 660

Answer: _____

17. What is the missing number in the box?

$$\frac{3}{5} = \frac{3 + 6}{5 + \boxed{?}}$$

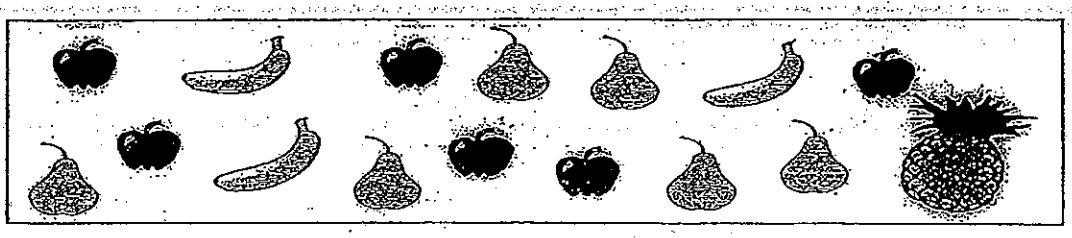
Answer: _____

18. Joshua has 80 stamps. He has 4 times as many stamps as Shawn. How many stamps do they have altogether?

Answer: _____

(Go on to the next page)

19. What is the ratio of the number of apples to the total number of fruits?
Express your answer in the simplest form.



Answer: _____

20. Joel jogs an average distance of 3 km every day.
How far does he jog in 3 weeks?

Answer: _____ km

21. Amelia has $81. Mei Ting has $18 less than Amelia. Find the ratio of Amelia's money to Mei Ting's money. Express your answer in its simplest form.

Answer: _____

(Go on to the next page)

22. A rectangular tank measuring 30 cm long and 20 cm wide contains 12 litres of water. Find the height of water in the tank.

Answer: _____ cm

23. The area of a triangle is 27 cm^2. If the height is 3 cm, what is the base of the triangle?

Answer: _____ cm

24. Mei Ling has many rectangular blocks each measuring 5 cm by 4 cm by 3 cm. What is the maximum number of such blocks that can be put into a square box of edge 20 cm?

Answer: _____

(Go on to the next page)

Do not writ in this spac

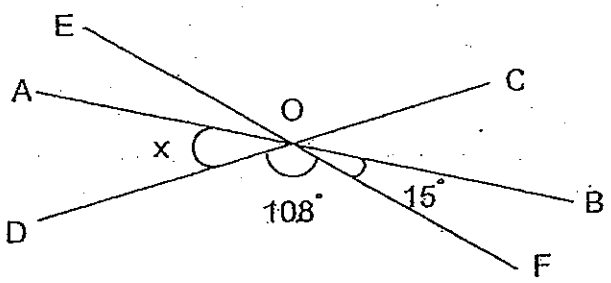
25. A set of 5 stickers cost $3.50. Zarina bought 45 stickers.
How much did she pay for the stickers?

Answer: $_____

(Go on to the next page)

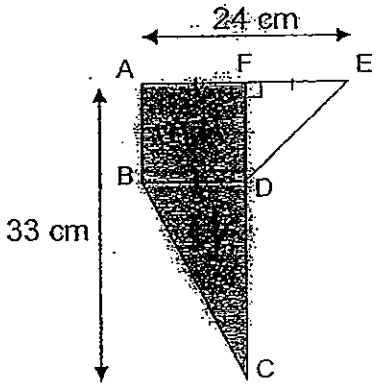
Questions 26 to 30 carry 2 marks each. Show your workings clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

26. AB, CD and EF are straight lines. Find $\angle x$.



Answer: _____°

27. The figure below is made up of a square and 2 triangles. Given that AF = FE, find the area of the shaded parts.

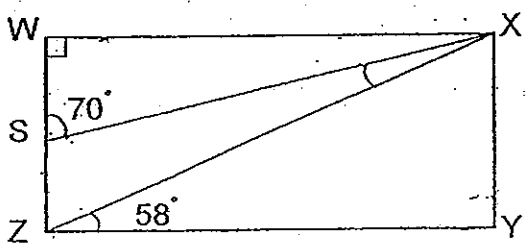


Answer: _____ cm^2

(Go on to the next page)

Do not wri
in this spa

28. In the figure (not drawn to scale), WXYZ is a rectangle. $\angle WSX = 70°$ and $\angle XZY = 58°$. Find $\angle SXZ$.



Answer: _____ °

29. Elgin saved 30% less money than Fazi. Guresh saved 40% more money than Fazi. Express Guresh's savings as a percentage of Elgin's savings.

Answer: _____ %

(Go on to the next page)

30. In an art class, the ratio of the number of boys to the number of girls was 3 : 4.

After 12 boys left the art class, there were $\frac{5}{12}$ as many boys as girls.

How many boys were there in the art class at first?

Answer: _____

---- End of Paper 1 ----

Rosyth School
Second Semestral Assessment 2012
Primary 5 Mathematics

Name: _____ Register No. _____

Class: Pr 5 -_____

Date: 29 October 2012 Parent's Signature: _____

Time: 1 h 40 min

PAPER 2

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. **Show your workings clearly** as marks are awarded for correct working.
4. Write your answers in this booklet.
5. You are allowed to use a calculator
6. Answer all questions.

Questions	Maximum Mark	Marks Obtained
Q 1 to 5	10	
Q 6 to 18	50	

Section	Maximum Mark	Marks Obtained
Paper 1	40	
Paper 2	60	
Total	100	

*** This booklet consists of 16 pages (excluding this cover page)**

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. Osman bought some cakes at an average price of \$5 each. He bought another cake which cost \$17 and the average price became \$7. How many cakes did he buy altogether?

Ans: _____

2. Joan, Sasha and Yati shared a packet of sweets in the ratio of 2 : 3 : 1. Yati gave all her sweets equally to Joan and Sasha. What is the ratio of the number of sweets Joan has to the number of sweets Sasha has now?

Ans: _____

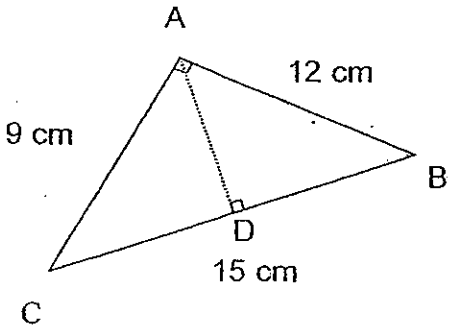
(Go on to the next page)

3. A group of pupils were given white and grey 'Smiley face' badges. They are arranged in the pattern shown below. If there are 74 badges, what is the colour of the last badge?

Ans: _____

Do not writ in this spac

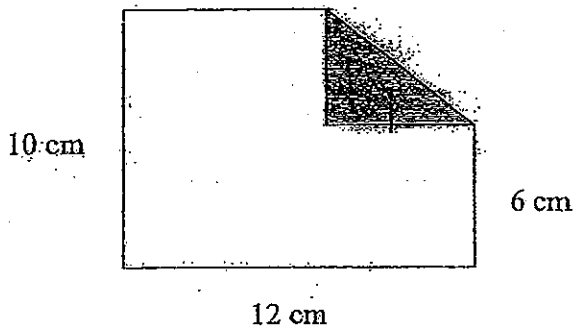
4. The triangle below is not drawn to scale. AB = 12 cm, BC = 15 cm and AC = 9 cm. Find the length of AD.



Ans: _____ cm

(Go on to the next page)

5. A rectangular piece of paper measuring 12 cm by 10 cm is folded at a corner forming a shaded isosceles triangle shown in the figure below. Express the unshaded area after the paper was folded as a fraction of the area of the rectangular piece of paper. (The figure is not drawn to scale.)



Ans: _____

(Go on to the next page)

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. Melvin had an equal number of goldfish and guppies in his aquarium. After 28 goldfish and 196 guppies had been sold, the number of goldfish was five times that of the number of guppies. How many guppies were there at first?

Ans: _____ [3m]

(Go on to the next page)

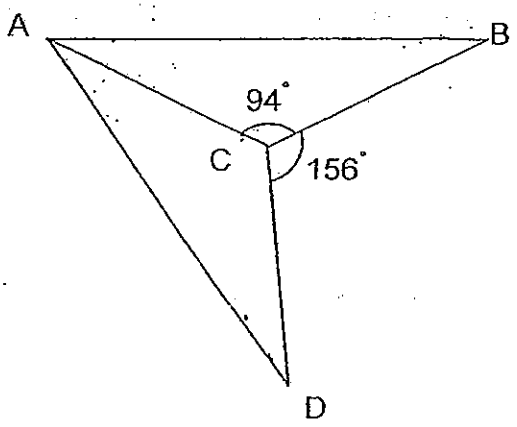
7. Hamid had $\frac{5}{7}$ as much money as his sister. After each of them had spent $154 on some game cartridges, Hamid had $\frac{7}{12}$ as much money as his sister. How much did his sister have at first?

Ans: _____ [3m]

107

8. The figure below (not drawn to scale) is made up of 2 isosceles triangles, ABC and ACD. AC = BC = CD.

(a) Find $\angle$ DAB.



Ans: _____ [3m]

(b) Based on question 8a, construct and label triangle ACD such that AD = 8 cm. [2m]

(Go on to the next page)

9. Josh and Zach shared $1 200. When their mother gave each of them $129, Zach had 25% more money than Josh. How much more money did Zach have than Josh now?

Ans: _____ [3m]

(Go on to the next page)

10. In a school hall, a certain number of desks can be arranged in exactly 15 desks per row. When the same number of desks is arranged in 12 desks per row, there will be 4 more rows and 9 desks left over. How many desks are there altogether?

Do not writ
in this spac

Ans: _____ [3m]

(Go on to the next page)

11. A rectangular tank measuring 30 cm by 12 cm by 16 cm contained some water. A cubical container with side measuring 12 cm is completely filled with water. All of the water from the cubical container is poured into the rectangular tank until it is $\frac{2}{3}$ filled. What is the amount of water in the rectangular tank at first?

Ans: _____ [3m]

(Go on to the next page)

12. Trisha spent 15% of her salary on food and transport every month. When her salary increased by 20% this month, she spent $88 more on food and transport. What was her new salary after the increment?

Do not wri in this spa

Ans: _____ [3m]

(Go on to the next page)

13. 32% of Jane's sum of money is equal to $\frac{3}{4}$ of Omar's sum of money. If they have a total sum of $642, how much does Omar have?

Ans: _____ [4m]

(Go on to the next page)

14. At a carnival, each child is given 4 packets of chocolate. Each adult receives 2 packets of chocolate. $\frac{3}{8}$ of the people at the carnival are adults. Given that only 4 290 packets of chocolate are given away, how many children are there altogether?

Ans: _____ [4m]

Do not w
in this sp

(Go on to the next page)

15. Tom, Jaya and Muthu had some amount of grapes each. If Tom gave Jaya 864 g of grapes, Tom and Jaya will have an equal amount of grapes. If Jaya gave 864 g of grapes to Tom, he would have $\frac{1}{4}$ of what Tom had. Muthu's amount of grapes is the total amount of grapes of the other two boys. How many kilogrammes of grapes did they have altogether?

Ans: _____ [4m]

(Go on to the next page)

16. A wooden box containing 18 flower pots weighed 30 kg. Later Uncle Mak added 2 more vases and 7 flower pots into the box and the mass of the wooden box with its contents became 49.2 kg. The mass of each vase was four times as heavy as the mass of each flower pot.

(a) What is the mass of the wooden box?

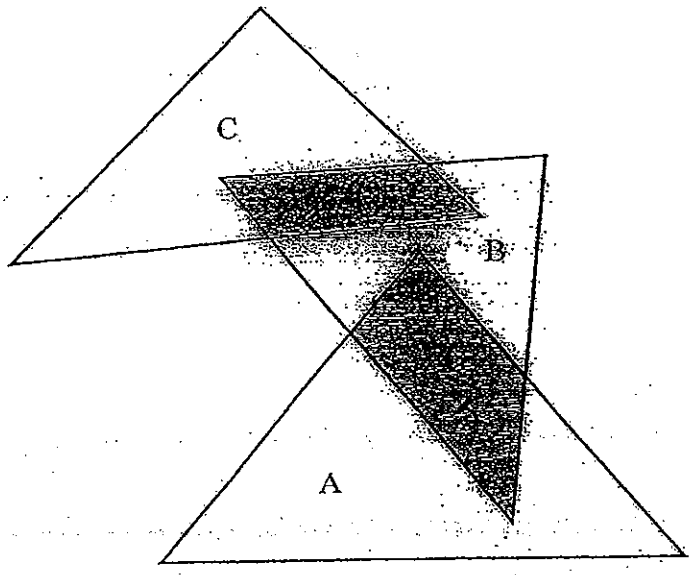
(b) Uncle Mak could only lift a maximum mass of 42 kg. What was the least number of flower pots that he should remove from the box so that he was able to lift the box?

Ans: (a) _____ [3m]

(b) _____ [2m]

(Go on to the next page)

17. The figure below shows 3 different triangles, A, B and C. $\frac{3}{10}$ of A and 40% of C is shaded. The shaded area of A is the same as the shaded area of C. What fraction of the figure is unshaded if 80% of B is shaded? (Leave your answer in its simplest form.)



Ans: _____ [5m]

(Go on to the next page)

18.

ABC RESTAURANT

For every 10 dining vouchers purchased, a 50% discount will be given to the 10th voucher.

a) Mrs Teo wants to purchase 24 dining vouchers. If each dining voucher cost $35, how much does she have to pay?

b) Mr Lim bought $542.50 worth of vouchers. How many vouchers did he purchase?

Ans: (a) _____ [3m]

(b) _____ [2m]

End of Paper

Have you checked your work thoroughly?

Do not writ in this spac

Answer Ke

~~EASTERN 2012~~

SCHOOL : ROSYTH
SUBJECT : PRIMARY 5 MATHEMATICS

TERM : SA2

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

16)61260 **17)10** **18)100** **19)3 : 8** **20)63km**

21)9 : 7

22)30 x 20 = 600
12000 ÷ 600= 20cm

23)27 x 2 =54
54 ÷ 3 = 18cm

24)20÷5 = 4
20÷4 = 5
20÷3 = 6
6 x 5 x 4 = 120

25)45÷5 = 9
9 x 3.5 = $31.5

26)180° – 123° = 57°

27)12 x 12 = 144
½ x 12 x 21 = 126
126 + 144 = 270cm^2

28)38°

29)200%

30)27 boys

Paper 2

1)17 − 7 = 10
10 ÷ 2 = 5
5 + 1 = 6 cakes

2)J : S : Y
2 : 3 : 1
4 : 6 : 2
5 : 7
The ratio is 5 : 7

3)18 x 4 = 72
72 + 2 = 74
The colour is grey

4)½ x 9 x 12 = 54
½ x 15 x AD = 54
54 ÷ ½ = 7.2cm

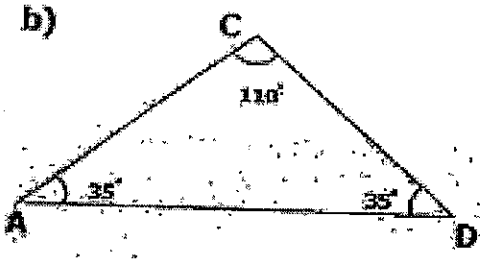
5)Area of Rec→12 x 10 = 120
Area a of tri→½ x 4 x 4 = 8
2 tri→8 x 2 = 16
Unshaded→120 − 16 = 104
104/120 = 13/15
The fraction is 13/15

6)1u→(196 − 28) ÷4 = 42
Guppy→42 + 196 = 238
There were 238 guppies at first

7)25 − 14 = 11
1u→154 ÷ 11 = 14
S→14 x 35 = $490
His sister had $490 at first

8)a)∠ACD→360° − 156° − 94° = 110°
∠ADC→(180° − 110°) ÷2 = 35°
∠CBA→(180° − 94°) ÷2 = 43°
∠DAB→43° + 35° = 78°

b)



9)5 + 4 = 9
9u→1458
1u→1458÷9 = 162
Z→162 x 5 = 810
J→162 x 4 = 648
810 – 648 = 162
Zach have $162 more than Josh

10)12 x 4 + 9 = 57
rows→57÷3 = 19
deska→19 x 15 = 285
There are 285 desks

11)Volume→30 x 12 x 16 = 5760
Cubical→12 x 12 x 12 = 1728
Water rec tank→5760÷3 x 2 = 3840
At first→3840 – 1728 = 2112
The amount of water was 2112cm3

12)New salary→120%
Spent→15% x 120% = 18%
18% - 15% = 3%
3%-->88
1%-->29 1/3
29 1/3 x 120 = $3520

13)8/25 J→ ¾ O m
24/75 J→24/32 O m
75 + 32 = 107
1u→642÷107 = 6
O$n→6 x 32 = 192
Omar has $192

14)1C→4 x 5 = 20
1A→2 x 3 = 6
20 + 6 = 26
1u→4290÷26 = 165
165 x 20 = 3300
No.children→3300÷4 = 825
There are 825 children

15)864 x 4 = 3456
3u→3456
1u→3456÷2 = 1152
5u→1152 x 5 = 5760
5760 x 2 = 11520
11520÷11.52

16)a)1u→(49.2 – 30) ÷15 = 1.28
18u→1.28 x 18 = 23.04
b→30 – 23.04 = 6.96
The mass of the box is 6.96kg
b)49.2 – 42 = 7.2
7.2÷1.28 = 5.625 ≈ 6
6 flower pots should be removed

17)13/19

18)10 vouchers→35 x 9 = 315
315 + 17.5 = 332.5
20 vouchers→332.5 x 2 = 665
35 x 4 = 140
Total→665 + 140 = $805
a) Mrs Teo has to pay $805

10 vouchers→332.5
542.5 – 332.5 = 210
Remaining→210÷35 = 6
Total→10 + 6 = 16
b)Mr Lim bought 16 vouchers

End
121