Rosyth School
First Continual Assessment 2006
Mathematics
Primary 6

Name: _____ Total 100

Class: Pr 6 - _____ Register No. _____ Duration: 2h 15 min

Date: 2 March 2006 Parent's Signature: _____

BOOKLET A

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. This paper consists of 2 booklets, Booklet A and Booklet B.
4. For questions 1 to 15 in Section A, shade the correct ovals on the Optical Answer Sheet (OAS).
5. ANSWER ALL THE QUESTIONS.

	Maximum	Marks Obtained
Booklet A Section A	20	
Booklet B Section B	30	
Booklet B Section C	50	
Total	100	

* This paper consists of 24 pages altogether.

Section A

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)

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1. Find the value of 24 000 x 200.
   (1) 4 800
   (2) 48 000
   (3) 480 000
   (4) 4 800 000

2. Divide 5005 by 100.
   (1) 0.5005
   (2) 5.005
   (3) 50.05
   (4) 500.5

3. Which of the following is the smallest?
   (1) $\frac{1}{2}$
   (2) $\frac{2}{3}$
   (3) $\frac{5}{7}$
   (4) $\frac{5}{6}$

4. James is y kg. William is 2 times as heavy as James. What is William's mass?
   (1) (2 + y) kg
   (2) (2 - y) kg
   (3) (2y) kg
   (4) $(\frac{y}{2})$ kg

5. Simplify $6a - 5 + 3a + 10$

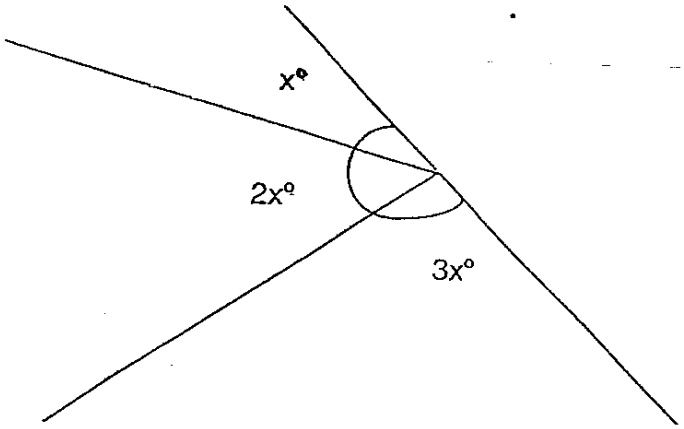
(1) $3a - 5$

(2) $3a + 15$

(3) $9a + 5$

(4) $9a - 15$

6. In the figure, not drawn to scale, all lines are straight lines. Find the value of $2x°$.



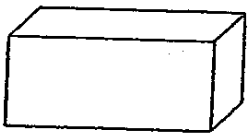
(1) 30°

(2) 60°

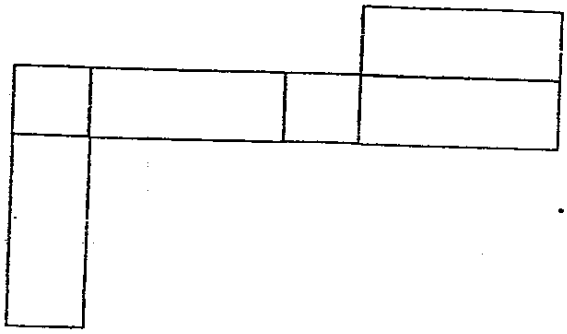
(3) 90°

(4) 120°

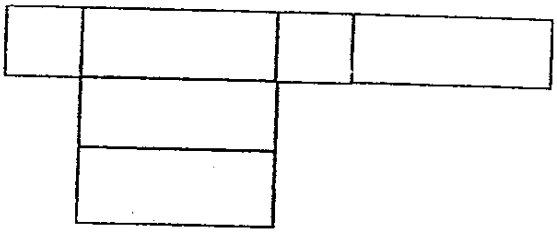
7. Which of the following is a net of the solid below?



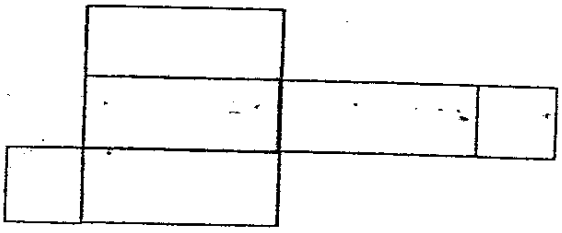
(A)



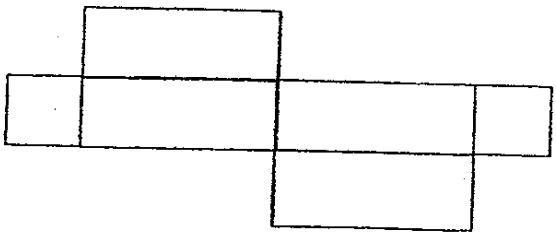
(B)



(C)



(D)



4

8. If A : B is 3 : 4, which of the following is **correct**?

(1) A is $\frac{3}{7}$ of B

(2) B is $\frac{4}{3}$ of A

(3) A is $\frac{4}{7}$ of B

(4) B is $\frac{3}{4}$ of A

9. The sides of a triangle are in the ratio of 2 : 5 : 3. If the perimeter is 20 cm, what is the length of the longest side?

(1) 20 cm

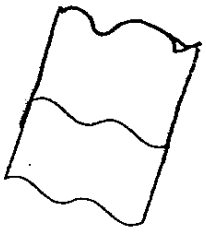
(2) 10 cm

(3) 6 cm

(4) 4 cm

10. Which of the following unit shape can form a tessellation?

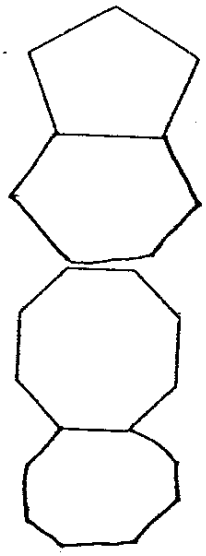
(1)



(2)

(3)

(4)



11. A set of 5 pencils costs 60 cents. How many pencils can May buy with $3.60?

(1) 6

(2) 7

(3) 30

(4) 35

12. Shane has some sweets. If he gives 2 sweets to each classmate, he will have 20 sweets left. If he gives 3 sweets to each classmate, he will need another 20 sweets. How many classmates does Shane have?

(1) 36

(2) 38

(3) 40

(4) 42

13. A pot is $\frac{1}{3}$ filled with green beans. The green beans are then poured into an empty container which has a capacity that is $\frac{1}{2}$ of the pot. What fraction of the container is filled with green beans?

(1) $\frac{1}{6}$

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

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

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

14. James and Nigel shared some marbles in the ratio of 4 : 3. In a game, James lost half of his marbles to Nigel. Then Nigel had 42 marbles more than what James had left. How many marbles did they have altogether?

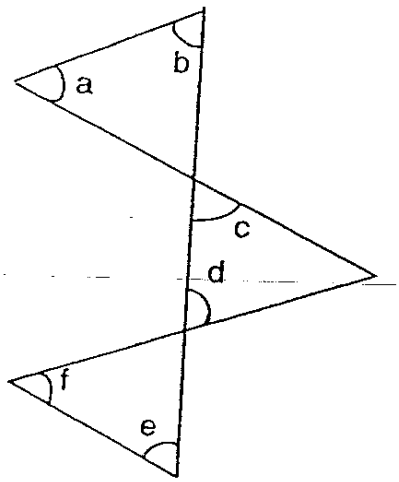
(1) 84

(2) 98

(3) 126

(4) 147

15. What is the sum of $\angle a + \angle b + \angle c + \angle d + \angle e + \angle f$ in the figure which is not drawn to scale?



(1) 180°

(2) 270°

(3) 360°

(4) 450°

Rosyth School
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Mathematics
Primary 6

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BOOKLET B

Instructions to Pupils:

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. This paper consists of 2 sections, Section B and C.
4. For questions 26 to 48, show all relevant working in the spaces provided.
5. ANSWER ALL THE QUESTIONS.

Section B

Questions **16** to **25** carry 1 mark each. Questions **26** to **35** carry 2 marks each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

16. Find the value of $40 + 60 \times 30 - 100 \div 50$.

Ans: _____

17. I am an even two-digit number. I am less than 25. The sum of my digits is 9. I am exactly divisible by 3. What number am I?

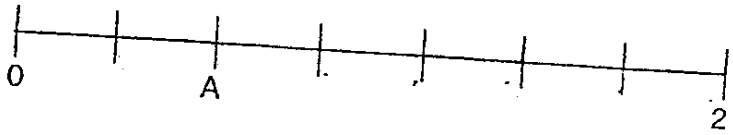
Ans: _____

18. How many quarters are there in $7\frac{3}{4}$?

Ans: _____

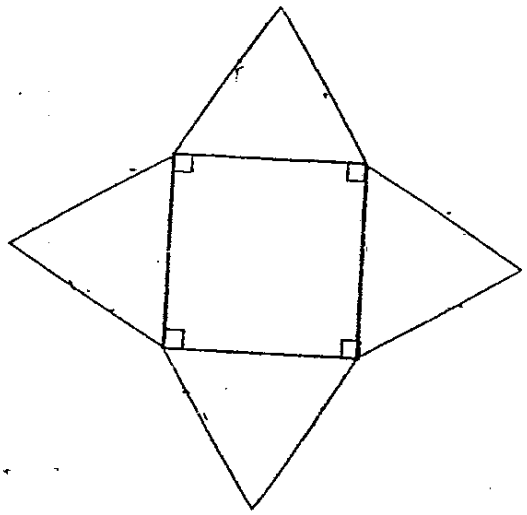
10

19. What is the value of A? Express your answer as fraction.



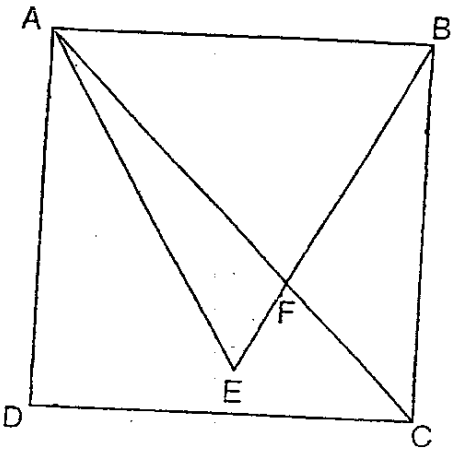
Ans: _____

20. The figure below is made up of a square and four equilateral triangles.
The length of the square is (p + 1) cm.
What is the perimeter of the figure in terms of p?



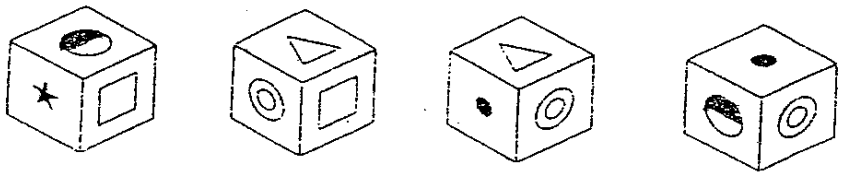
Ans: _____ cm

21. ABCD is a square and ABE is an equilateral triangle, find ∠AFB.



Ans: _____

22. Here are four views of a cube.



What shape is on the face opposite  ?

Ans: _____

23. What is the ratio of 60 g to 1 kg 20 g?
(Express your answer in its simplest form)

Ans: _____

24. Mrs Lee uses 60g of salt for every 100g of sugar to make a cup of sauce. If she uses 90g of salt, how much sugar should she use?

Ans: _____ g

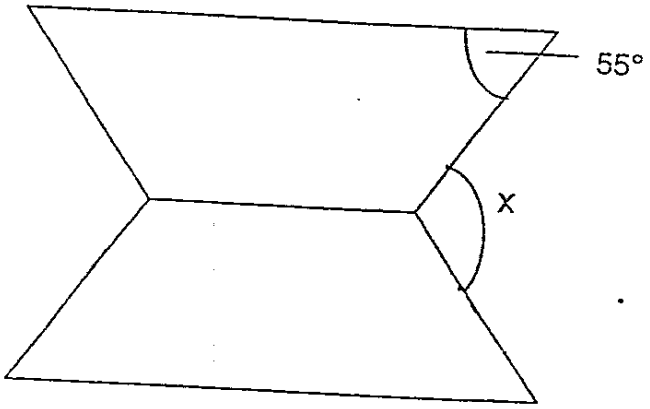
25. The ratio of Ali's age to Bob's age is 1 : 3. Ali is 5 years old now. What will be Bob's age next year?

Ans: _____

Questions 26 to 35 carry 2 marks each. Show your working clearly in the space below each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(20 marks)

26. The figure below is not drawn to scale. It is made up of 2 identical trapeziums. Find $\angle x$.



Ans: _____ °

27. Paul and his brother shared $96. Paul received $16 more than his brother. Find the ratio of Paul's share to his brother's share.

Ans: _____ 14

28. Jon had $\frac{3}{5}$ as many marbles as William. If Jon ~~gives~~ gave $\frac{1}{2}$ of his marbles to William, William ~~will have~~ will have 100 more marbles than Jon. How many ~~more marbles~~ marbles does William ~~have than Jon~~ have now?

Ans: _____

29. In a school library, the ratio of the number of fiction books to the number of non-fiction books is 6 : 5 and the ratio of the number of non-fiction books to the number of reference books is 3 : 2. If there are 7200 more fiction books than reference books, how many books are there in the library?

Ans: _____

30. There are 40 pupils in a class. 26 of them drank hot chocolate and 24 of them drank milk. 13 of them drank both. How many pupils drank neither hot chocolate nor milk?

15

Ans: _____

31. $\frac{1}{4}$ of the area of a rectangular field is 900 m^2. What is $\frac{1}{2}$ of the area of the same rectangular field?

Ans: _____ m^2

32. The ratio of the number of Ali's stamps to the number of Linda's stamps is 8 : 3. After giving Linda $\frac{1}{4}$ of his stamps, Ali still has 20 stamps more than Linda. How many stamps does Ali have at first?

Ans: _____

33. A string w cm long is cut into 2 pieces. One piece is 3 cm longer than the other. Find the length of the shorter piece in terms of w.

16

Ans: _____ cm

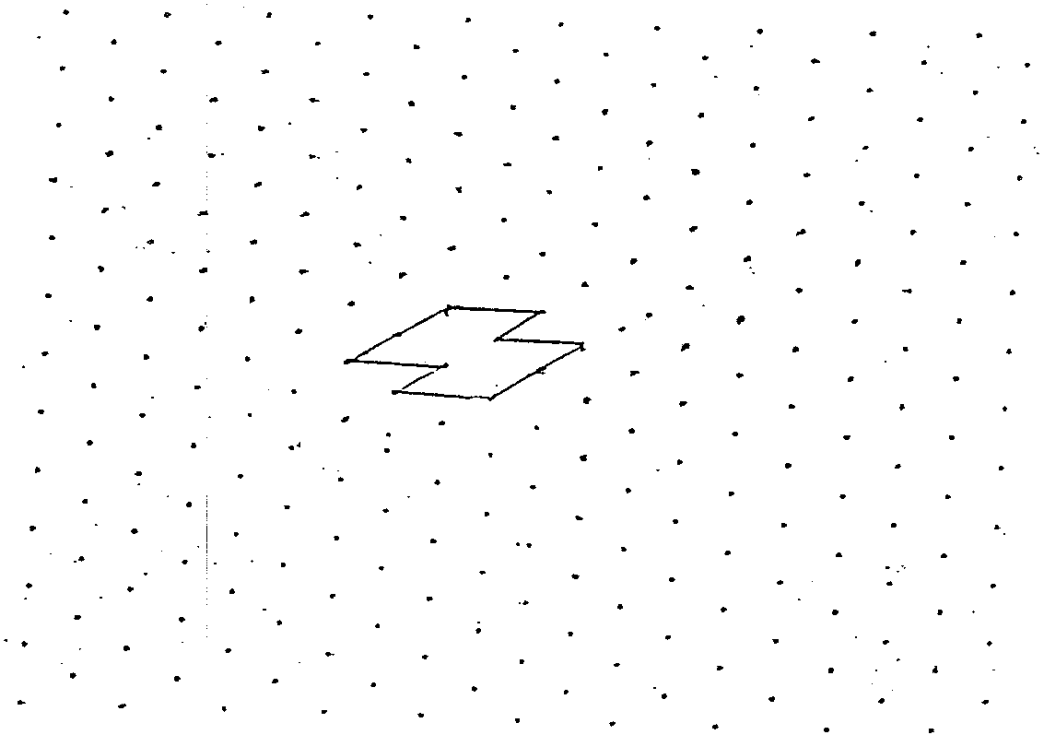
34. There are some cookies in a cookie jar. For every 13 cookies James gets, Desmond gets 7 cookies. If James gets 39 ~~sweets~~ cookies, how many cookies ~~are~~ were there in the cookie jar?

at first

and Desmond gets the rest

Ans: _____

35. The figure below shows one unit. Draw 2 more units to show that the figure below can tessellate.



17

Section C

For questions 36 to 48, show your working clearly in the space below each question and write your answers in the spaces provided.

The marks for each question or part-question is shown in brackets ( ) at the end of each question. (50 marks)

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36. Tim and Wilma shared $208. Wilma had the larger amount. After each of them had spent half of what they had originally, the difference between them is $68. How much did Wilma have at first?

Ans : _____(3m)

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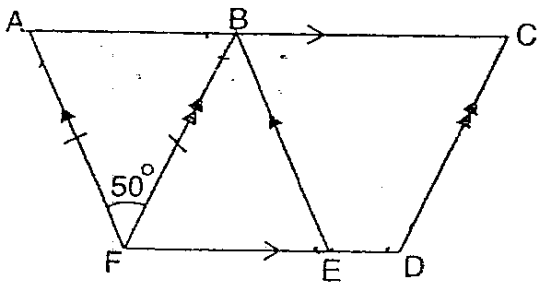
37. The following figure is not drawn to scale. ABEF and BCDF are parallelograms. Find

(i) ∠BEF

(ii) ∠EDC



Ans : (i)_____(1m)

(ii)_____(2m) 18

38. $\frac{3}{4}$ of the pupils in the class wear spectacles. $\frac{5}{6}$ of those who wear spectacles are boys. If there are 5 girls who wear spectacles, how many more pupils in the class wear spectacles than pupils who do not wear spectacles?

Ans : _____ (3m)

39. Tom weighs (10 + 7w) kg. Kumar weighs 5w kg lighter than Tom. Hariz weighs 3w kg more than Kumar. What is the total weight of the three boys if w = 4 ?

Ans : _____ (3m)

40. At first, Kenny had thrice as many stickers as Ahmad. After Kenny gave away 60 of his stickers, Ahmad had twice as many stickers as Kenny. How many stickers did they have altogether at first?

Ans : _____ (3m)

/ 9

41. Amy, Bala and Candy were given $448 to share among themselves. Amy received $52 more than Candy. Bala received twice as much money as Candy. How much money did Amy receive?

Ans : _____ (3m)

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42. Jenny's monthly allowance is $220. She spent $\frac{1}{5}$ of it on transport and $\frac{3}{10}$ of it on food. She spent half of the remaining money on her hobby and saved the rest. How many months would she take to save $330?

Ans : _____ (4m)

20

43. Susan spent $296 on 32 shirts. She paid $8 each for the short-sleeved shirts and $12 each for the long-sleeved ones. How many short-sleeved shirts did she buy?

Ans : _____ (4m)

2.1

46. Jane and Daphne each bought a certain number of ribbons from a shop. Jane gave $\frac{1}{6}$ of her ribbons to Daphne. Then Daphne gave $\frac{2}{5}$ of what she had back to her. Next, Jane counted all her ribbons and gave $\frac{1}{4}$ of them to Daphne. In the end, Jane had 54 ribbons and Daphne had 51 ribbons. How many ribbons did each of them buy from the shop at first?

Ans : _____(5m)

24

47. There were 50 more marbles in Box A than in Box B. 10 marbles were transferred from Box B to Box A. Next, 14 marbles from Box C were then transferred to Box A. Finally, Box A had thrice as many marbles as Box B.

(a) If Box B had twice as many marbles as Box C at first, how many marbles were in Box C at first?

(b) How many marbles were there altogether?

Ans : (a) _____ (3m)

(b) _____ (2m)

25

48. Mr Ong had some oranges, pears and durians. After selling some of them, there were 6 pears for every 5 oranges left and 7 oranges for every 3 durians left. After selling 168 oranges, he had 456 pears and durians left. The number of pears sold was the same as the number of durians sold.

(a) How many oranges had he at first?

(b) If the number of pears was twice the number of durians at first, what is the total number of pears and durians sold?

Ans : (a) _____(2m)

(b) _____(3m)

26

End of Paper
Please check your work carefully.

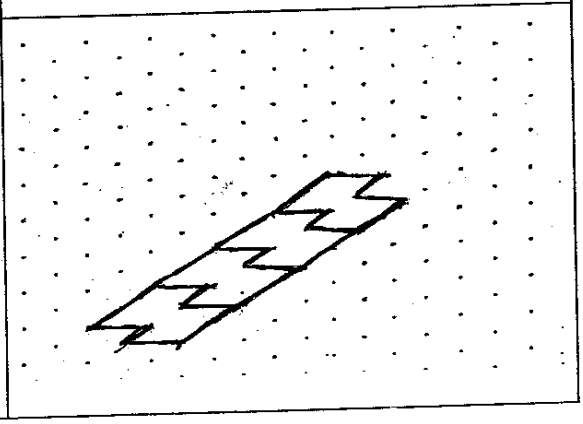
Rosyth Primary School

Primary 6 Maths CA1 Exams (2006)

Answer Sheets

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

16. **1838**
17. 18
18. **31 quarters**
19. $\frac{4}{7}$
20. **(8p+8)cm**
21. **75**
22. **Δ**
23. **1 : 17**
24. **150g**
25. **16 years old**

26.	**110**	27.	**7 : 5**
28.	**130 marbles**	29.	**38700 books**
30.	**3 pupils**	31.	**1800m²**
32.	**160 stamps**	33a.	**(w − $\frac{3}{2}$) cm**
34.	**60 cookies**	35.	

36.	$(208 – 68 –68) = $72 $72 ÷ 4 = $18 $(18 + 18 + 68 + 68) = $172 Wilma had <u>$172</u> at first (Ans)	37.(i) (ii)	∠a = ∠b ∠a = (180° – 50°) ÷ 2 = 65° ∠BEF = <u>65°</u> (opposite angles) (Ans) ∠EDC = (180°– 65°) = <u>115°</u> (Ans)
38.	5 x 6 = 30 5 x 2 = 10 30 – 10 = 20 20 more pupils in the class wear Spectacles than pupils who do not wear spectacles	39.	7 x 4 = 28 28 + 10 = 38 5 x 4 = 20 38 – 20 = 18 3 x 4 = 12 12 + 18 = 30 30 + 18 + 38 = 86kg The total weight is <u>86kg</u> (Ans)
40.	2 ÷ 2 = 1 6 – 1 = 5 5u = 60 1u = 12 2 + 6 = 8 12 x 8 = 96 stickers (Ans) They had <u>96 stickers</u> altogether at first.	41.	448 – 52 = 396 396 ÷ 4 = 99 99 + 52 = 151 Amy received <u>$151.00</u> (Ans)
42.	220 ÷ 20 = 11 11 x 5 = 55 330 ÷ 55 = 6 months She would take <u>6 months</u> (Ans)	43.	<u>Short-sleeve</u> <u>Long-sleeve</u> 22 x $8 10 x $12 $176 $120 $176 + $120 = $296.00 She bough <u>22 short-sleeve shirt</u> (Ans)

44a.

20 – 12 = 8
200 ÷ 8 = 25
25 x 12 = 300

There are 300 trees in Orchid Park

44b.

25 x 20 = 500
25 x 15 = 375
500 – 375 = 125
500 – 300 = 200
125 + 200 = 325

The total number of trees had to be added is 325 (Ans)

45.

200 ÷ 2 = 100
201 x 100 = 20100
20100 = $201.00 (Ans)

46.

3u = 54
1u = 18
4u = 18 x 4
= 72

3u = 33
2u = 22
5u = 55
72 – 22 = 50
5u = 50
1u = 10
6u = 60 (Jane) (Ans)
= 55 – 10
= 45 (Daphne) (Ans)

47a.

50 + 10 + 14 = 74
74 + 10 = 84
84 ÷ 2 = 42
42 + 10 = 52
52 ÷ 2 = 36

There were 26 marbles at first (Ans)

47b.

26 + 52 = 78
52 + 50 = 102
102 + 78 = 180 (Ans)

There were 180 marbles altogether.

48a

6 : 7 : 3
42 : 35 : 15
42 + 15 - 57
57u = 456
35u = 280
= 280 + 168
= 448 oranges

48b.

42u = 8 x 42
= 336
15u = 8 x 15
= 120
336 + 96
= 432
120 + 96
= 216
432 : 216
2 : 1
96 + 96 = 192 pears + durians (Ans)