

Name : _____ () Date: _____

Class : Primary 5(SY)C/G/SE/P

Time : 2 h 15 min

SINGAPORE CHINESE GIRLS' SCHOOL

FIRST SEMESTRAL ASSESSMENT 2007

PRIMARY 5 EM 1/2

MATHEMATICS

BOOKLET A

15 Questions

20 Marks

Total Time For Booklets A and B : 2 h 15 mins

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

SINGAPORE CHINESE GIRLS' SCHOOL
FIRST SEMESTRAL ASSESSMENT 2007
MATHEMATICS

Name : _____ ()
Class : Primary 5 SY / C / G / SE / P

Date : _____
Time : 2 hr 15 min

Booklet A (20 marks)

Questions 1 – 10 carry 1 mark each. Questions 11 – 15 carry 2 marks each.

For each question, 4 options are given. One of these is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval in the Optical Answer Sheet (OAS).

1. In 4 520 386, the value of the digit 5 is _____.

- | | |
|---------------------|-------------------------|
| (1) 5×100 | (3) $5 \times 10\,000$ |
| (2) 5×1000 | (4) $5 \times 100\,000$ |

2. Express 20 minutes as a fraction of 1 hour.

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

3. The highest common factor of 18 and 27 is _____.

- | | |
|-------|-------|
| (1) 6 | (3) 3 |
| (2) 2 | (4) 9 |

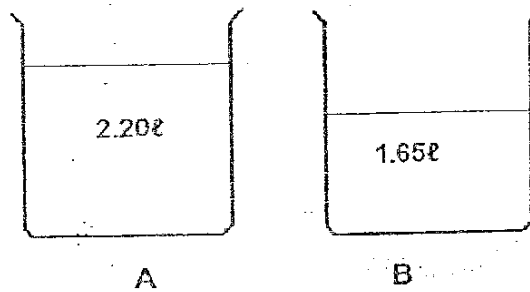
14

4. Father weighs 71kg. I am 19kg lighter than him. What is our total mass?

- (1) 52 kg
- (2) 90 kg
- (3) 123 kg
- (4) 132 kg

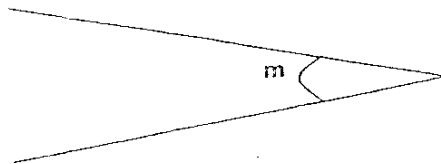
5. Ai Lee has a piece of string 3 m long. She uses 35 cm of it to tie a parcel. What is the **maximum** number of such parcels she can tie?

- (1) 5
- (2) 7
- (3) 8
- (4) 10



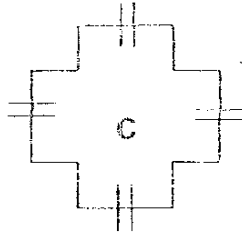
6. Beaker A has _____ more water than Beaker B.

- (1) 505 ml
- (2) 550 ml
- (3) 1505 ml
- (4) 1550 ml



7. In the figure above, $\angle m$ is

- (1) between 40° and 60°
- (2) between 80° and 100°
- (3) between 120° and 140°
- (4) between 180° and 210°



8. Figure C has _____ lines of symmetry.

- (1) 1
- (2) 2
- (3) 3
- (4) 4

9. Chloe saves \$15 and Rachel saves \$50. What is the ratio of Chloe's savings to Rachel's savings?

- (1) 3 : 10
- (2) 3 : 15
- (3) 5 : 25
- (4) 5 : 50

10. Which of the following is not an equivalent ratio of 3 : 4 : 5?

- (1) 4 : 5 : 6
- (2) 6 : 8 : 10
- (3) 9 : 12 : 15
- (4) 12 : 16 : 20

11. The best estimate for $4\,561 \times 213$ is _____.

- (1) 800 000
- (2) 1 000 000
- (3) 1 200 000
- (4) 1 500 000

116

12. The cost of 6 similar T-shirts is \$96. Find the cost of 9 such T-shirts.

- (1) \$54 (3) \$144
 (2) \$84 (4) \$196

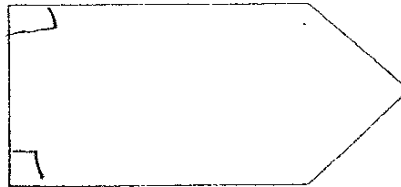
13. 180 girls were asked to name their favourite movie.
 The table below represents their responses.

Movie Title	Number
High School Musical	86
Matilda	7
Harry Potter	38
The Cheetah Girls	49

Which 2 movie titles have a difference of 48 in the number of response?

- (1) High School Musical and The Cheetah Girls
 (2) The Cheetah Girls and Harry Potter
 (3) High School Musical and Harry Potter
 (4) Matilda and The Cheetah Girls

14. How many right angles are there in this figure?



- (1) 1 (3) 3
 (2) 2 (4) 4

15. Siti is $\frac{3}{10}$ of her father's age now. Find the ratio of her father's age to their total age.

- (1) 3 : 10 (3) 10 : 13
 (2) 10 : 3 (4) 13 : 10

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SINGAPORE CHINESE GIRLS' SCHOOL

FIRST SEMESTRAL ASSESSMENT 2007

PRIMARY 5 EM 1/2

MATHEMATICS

BOOKLET B

33 Questions

80 Marks

Total Time For Booklets A and B : 2 h 15 mins

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

ANSWER ALL QUESTIONS.

18

SINGAPORE CHINESE GIRLS' SCHOOL
FIRST SEMESTRAL ASSESSMENT 2007
MATHEMATICS

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Name : _____
Class : Primary 5 / SY / C / G / SE / P

Date : _____
Time : 2 hr 15 min

Booklet B (30 marks)

Questions 16 – 25 carry 1 mark each. Questions 26 – 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. $5\,400 \times 5 = 5000 \times 5 + \underline{\hspace{2cm}} \times 5$

Ans: _____

17. $67 + 30 \div 6 - (7 \times 10) = \underline{\hspace{2cm}}$

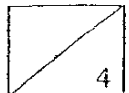
Ans: _____

18. Jane had 54 sweets. She ate $\frac{1}{9}$ of them. How many sweets did she eat?

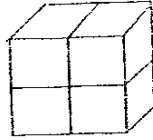
Ans: _____

19. Mrs Tan took 10 days to sew a dress. If she completed it on a Thursday, on which day of the week did she start sewing the dress?

Ans: _____



20. 4 cubes of edge 5-cm each, are placed together to form the cuboid shown below. What is the volume of this cuboid ?

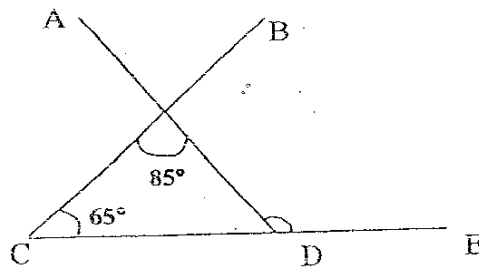


Ans: _____ cm³

21. Sally started to do her homework at 3.30pm. It took her $1\frac{1}{3}$ h to finish her homework. What time did she finish doing her homework?

Ans: _____ pm

22. In the diagram below, AD, BC and CE are straight lines. Find $\angle ADE$.



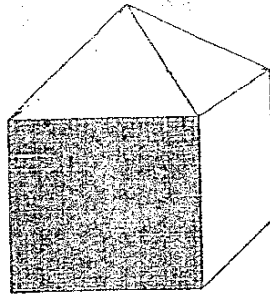
Ans: _____ °

Do not write in this column.



121

23. There are _____ faces in this solid.



Do not write in this column.

Ans: _____

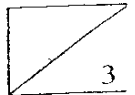
24. A piece of wire 72m long is cut into three pieces in the ratio of 3 : 2 : 4. What is the length of the shortest piece?

Ans: _____ m

25. Rachel and Anne shared 84 stickers in the ratio of 5 : 7. How many stickers did Anne get?

Ans: _____

122



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.

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26. A tank is $\frac{2}{7}$ full. However it has a capacity of 5460 ml. How much more water can it contain? (Give your answer in litres)

Ans: _____

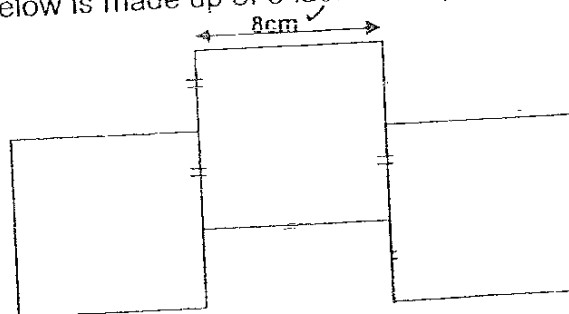
27. A factory has 2854 male workers and half as many female workers. How many workers are there altogether

Ans: _____

28. Each side of Square A is 9cm. The area of Rectangle B is twice the area of Square A. What is the area of Rectangle B?

Ans: _____ cm²

29. The figure below is made up of 3 identical squares. Find its perimeter.



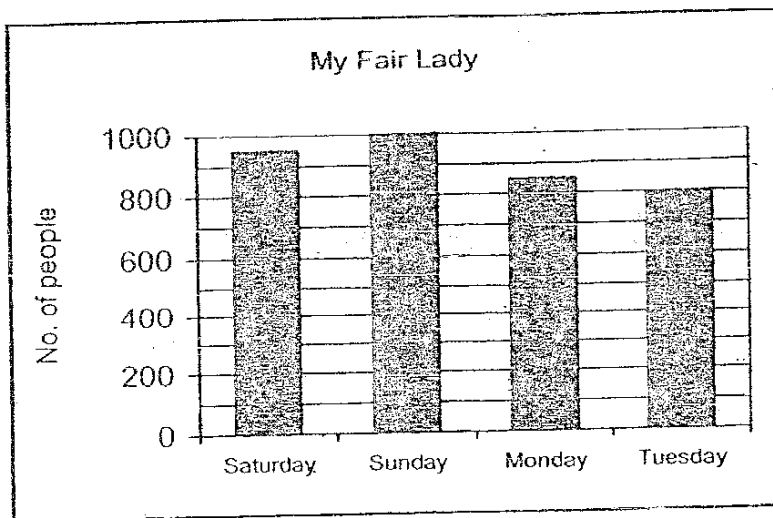
Ans: _____ cm

30. Su Jin bought a bag and a pair of shoes. She paid \$70 for them. If the bag cost 4 times as much as the pair of shoes, how much did she pay for the pair of shoes?

Do not write in this column

Ans: \$ _____

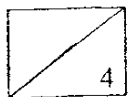
The graph below shows the number of people at a play, My Fair Lady, from Saturday to Tuesday. Study the graph and answer question 31.



31. Find the total number of people who attended the play on Saturday, Monday and Tuesday. Round off the answer to the nearest thousand.

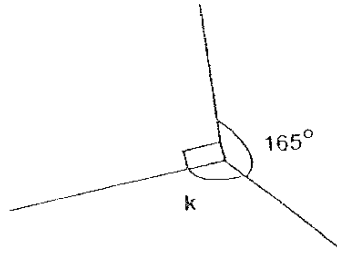
Ans: _____

124



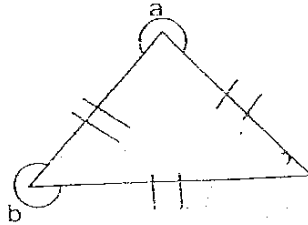
32. The figure below is not drawn to scale. All lines are straight lines.
Find $\angle k$.

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this
column.



Ans: _____°

33. The figure below is not drawn to scale. Find the sum of angle a and angle b.



Ans: _____°

34. The ratio of the number of boys to the number of girls in a Chinese language tuition centre is 8 : 5. If there are 48 boys, how many more boys than girls are there in the Chinese language tuition centre?

125

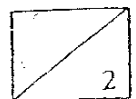
Ans: _____

35. For every 5 apples at a stall, there were 3 oranges. For every 2 pears, there were 4 oranges. Find the ratio of apples to pears to oranges. (Give your answer in its simplest form)

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Ans: _____

26



SINGAPORE CHINESE GIRLS' SCHOOL
FIRST SEMESTRAL ASSESSMENT 2007
MATHEMATICS

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column.

Name : _____ ()
Class : PR 5(SY) / C / G / SE / P

Date: _____
Time : 2 hr 15 min

Booklet B (50 marks)

Write your answers to questions 36 to 48 in the space provided. For each question, show your working clearly in the space provided.

The number of marks available is shown in brackets () at the end of each question or part question.

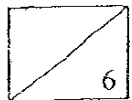
36. Town A and Town B have a total of 82 000 people altogether. If 4000 people move from Town B to Town A, Town B will have 3 times as many people as Town A. How many people were there in Town B at first?

Ans: _____ (3 marks)

37. A box of cookies was shared equally among 28 boys. 6 of them gave all their cookies to the rest of the boys. As a result the rest of the boys received 3 more cookies each. How many cookies were there in the box at first?

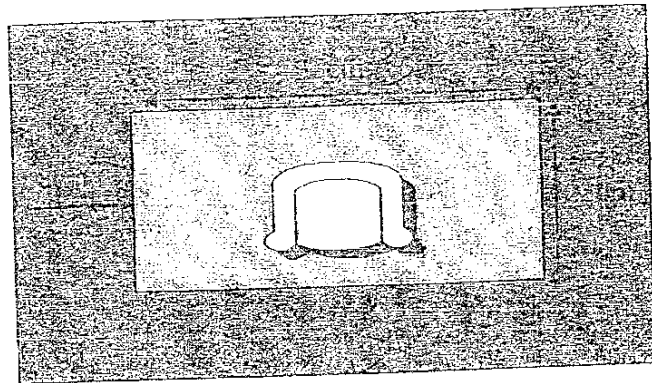
Ans: _____ (3 marks)

128



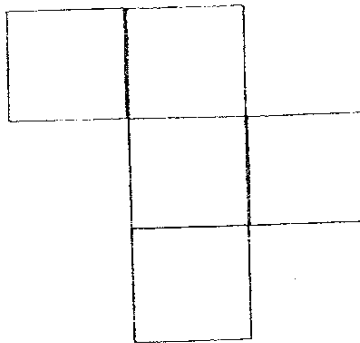
38. A picture measuring 35cm by 28cm is mounted on a rectangular cardboard, leaving a margin of 3cm all around. Find the area of the cardboard that is not covered by the picture.

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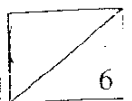


Ans: _____ (3 marks)

39. The figure below is made up of 5 identical squares. If the area of the figure is 180cm^2 , find its perimeter.

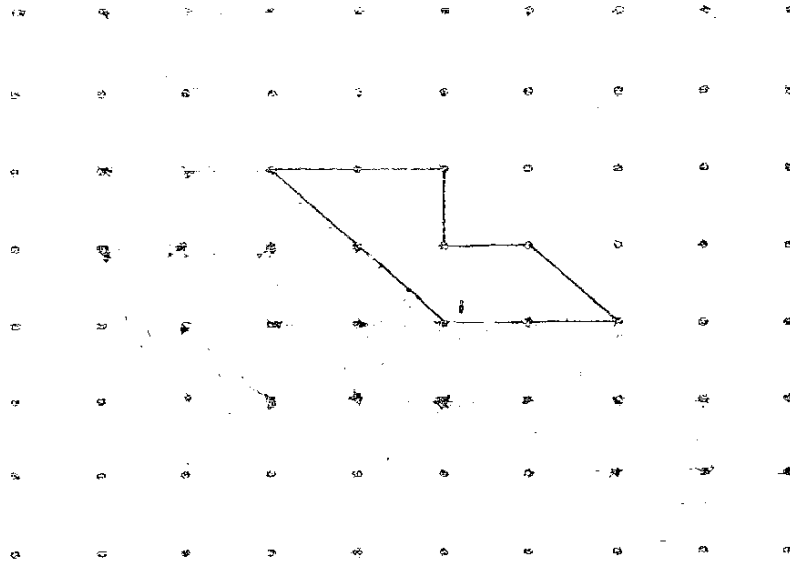


129
Ans: _____ (3 marks)



40. Draw 3 more unit shapes to tessellate. (3 marks)

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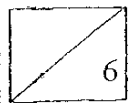


(3 marks)

41. A dining table and 6 chairs cost \$630. The ratio of the price of the table to the price of the chair is 3 : 1. What is the cost of a dining table and 4 chairs?

Ans : _____ (3 marks)

130



42. The number of people participating in a marathon is between 32 and 60. If the competitors get into groups of 6, there will be remainder of 2. If they get into groups of 8, there will be a remainder of 4. How many people are there in the marathon?

Do not write in this column.

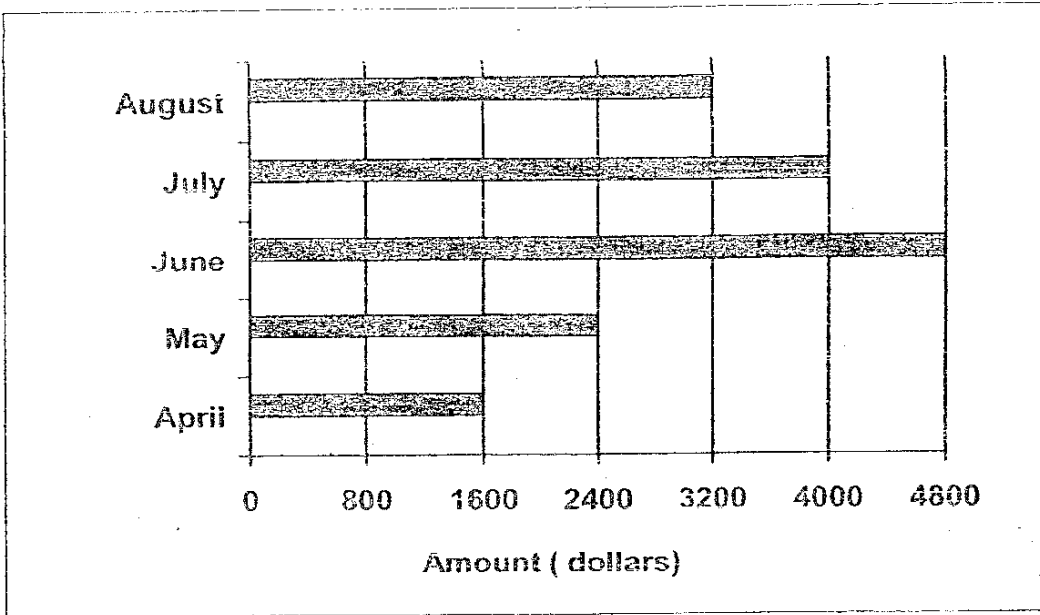
Ans: _____ (4 marks)

131



43. The graph below shows the earnings of Mr Lim over a 5-month period.

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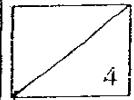


- (a) Find his total earnings for 5 months.
- (b) The ratio of his earning in _____ to his earning in _____ is 5 : 6.

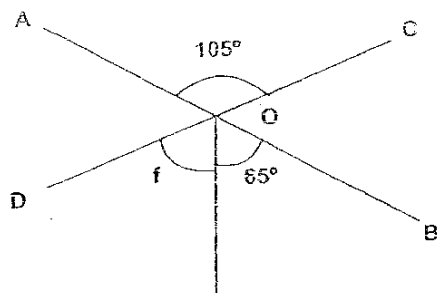
Ans: (a) _____ (2 mark)

(b) _____ and _____ (2 marks)

132

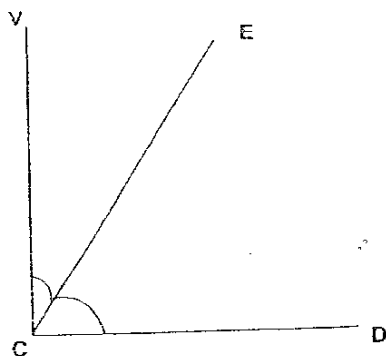


44 (a) AB and CD are straight lines. Find $\angle f$.



Do not write in this column.

(b) $\angle VCD$ is a right angle. $\angle ECD$ is twice the size of $\angle VCE$. Find $\angle VCE$.



Ans: (a) _____ (2 marks)

(b) _____ (2 marks)

13.3



45. Mother made 60 cupcakes. She kept $\frac{1}{6}$ of them and gave $\frac{1}{10}$ of the remainder to her friend.

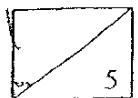
- (a) What fraction of the cupcakes had she left?
- (b) In addition to what was left, she decided to make another 20 cupcakes and sold them at 5 for \$3. How much did she collect from the sale?

Do not write in this column.

Ans : (a) _____ (2 marks)

(b) _____ (3 marks)

134

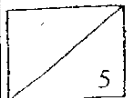


46. $\frac{3}{10}$ of Jane's beads is equal to $\frac{1}{2}$ of Tricia's beads. When Jane gave $\frac{1}{5}$ of her beads to Pat, who has no beads at all, the ratio of Tricia's beads to Pat's beads is 3 : 1. If the 3 girls have 896 beads altogether, how many beads does Tricia have?

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column.

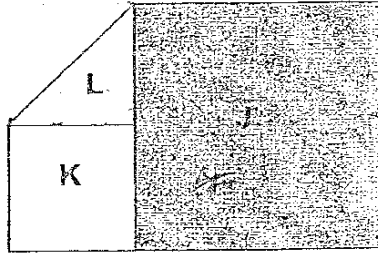
Ans: _____ (5 marks)

135



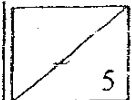
47. In the figure, J and K are squares and L is a right-angled triangle. The areas of J and K are 81cm^2 and 25cm^2 respectively. What is the area of L?

Do not write in this column.



Ans: _____ (5 marks)

126



48. Anna gets \$4 less pocket money than Kim each week. They each spend \$16 per week and save the rest. When Kim saves \$63, Anna only saves \$35. How much pocket money does Kim get each week?

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column.

137

Ans: _____ (5 marks)

5

CHECK YOUR WORK CAREFULLY

SCGS Primary School

Primary 5 Maths SA1 Exam (2007)



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

16. 400

17. 2

18. 6

19. Tuesday

20. 600

21. 4.50pm

22. 150°

23. 9

24. 16m

25. 49

26. $1 - \frac{2}{7} = \frac{5}{7}$

$$\frac{5}{7} \times 5460 = 3900\text{ml}$$

$$= 3.9\text{L}$$

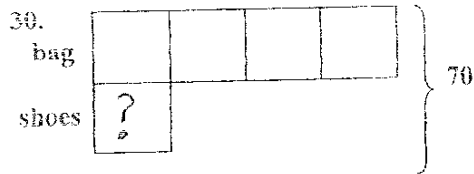
27. $\frac{2854}{2} = 1427$

$$1427 + 2854 = 4281 \text{ workers}$$

28. $9 \times 9 = 81$

$$81 \times 2 = 162\text{cm}^2$$

29. $10 \times 8\text{cm} = 80\text{cm}$



$$\$70 \div 5 = \$14$$

31. $950 + 850 + 800 = 2600$
 ≈ 3000

32. $360^\circ - 165^\circ - 90^\circ = 105^\circ$

33. $a = 360^\circ - 60^\circ = 300^\circ$
 $b = 300$
 $a + b = 300 \times 2 = 600^\circ$

34. $8u = 48$
 $1u = 6$
 $3u = 3 \times 6$
 $= 18$

35. $A : O$ $O : P$
 $5 : 3$ $4 : 2$
 $\times 4 \quad \times 4$ $\times 3 \quad \times 3$
 $20 \quad 12$ $12 \quad 6$

$A : P : O$
 $20 : 6 : 12$
 $10 : 3 : 6$

36. $82000 - 16000 = 66000$
 $66000 \div 4 = 16500$
 At first $\longrightarrow 16500 \times 3 = 49500$
 $4000 \times 4 = 16000$
 $49500 + 16000 = 65500$

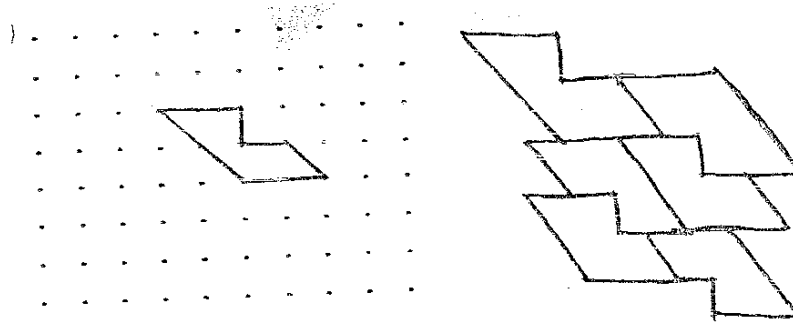
37. $28 - 6 = 22$
 $22 \times 3 = 66$
 $66 \div 6 = 11$
 $28 \times 11 = 308$ cookies

38. Length of rectangle = $35 + 3 + 3 = 41\text{cm}$
 Breadth of rectangle = 34cm
 Picture = 35×28
 = 980cm^2
 Rectangle = 41×34
 = 1394cm^2

Not recovered = $1394 - 980$
 = 414cm^2

39. Area of each square = $180 \div 5 = 36$
 $6 \times 6 = 36\text{cm}^2$
 Perimeter = $6 \times 12 = 72\text{cm}$

40.



41. 1 table = $3u$
 1 chair = $1u$
 1 table + 6 chairs = $9u$
 $9u = \$630$
 $1u = \$70$
 1 table + 4 chair = $7u$
 $7u = 7 \times \$70$
 = $\$490$

42.

People	Groups of 6	Groups of 8	check
40	$40 \div 6 = 6 \text{ r}4$	$40 \div 8 = 5$	x
45	$45 \div 6 = 7 \text{ r}3$	$45 \div 8 = 5 \text{ r}5$	x
44	$44 \div 6 = 7 \text{ r}2$	$44 \div 5 = 5 \text{ r}4$	✓

43a. Total = $1600 + 2400 + 4800 + 4000 + 3200$
 = $\$16000$

43b. July and June

44a. $105^\circ - 65^\circ = 40^\circ$

44b. $90 \div 3 = 30$
 $\angle VCE = 30^\circ$

45a. $1 - \frac{1}{6} = \frac{5}{6}$

$$1 - \frac{1}{10} = \frac{9}{10}$$

$$\frac{9}{10} \times \frac{5}{6} = \frac{3}{4}$$

She had $\frac{3}{4}$ of the cupcakes left.

45b. $\frac{3}{4} \times 60 = 45$

$$45 + 20 = 65$$

$$65 \div 5 = 13$$

$$13 \times \$3 = \$39$$

She collected \$39 from the sale.

46. $1u = 896 \div 16 = 56$

$$6u = 56 \times 6 = 336$$

47. $\sqrt{81} = \sqrt{9 \times 9} = 9\text{cm}$

$$\sqrt{25} = \sqrt{5 \times 5} = 5\text{cm}$$

$$9 - 5 = 4\text{cm}$$

$$\frac{1}{2} \times 4 \times 5 = 10\text{cm}^2$$

The area of L is 10cm^2

48. $\$63 \div \$35 = \$28$

$$\$28 \div \$4 = 7 \text{ weeks}$$

$$\$63 \times 7 = \$9$$

$$\$9 + \$16 = \$25$$

Kim gets \$25 each week.