



RAFFLES GIRLS' PRIMARY SCHOOL

SEMESTRAL ASSESSMENT 1 2007

Name : _____ () Class: P5__

09 May 2007 MATHEMATICS Att: 2 h, 45 min

Your Score Out of 100 marks		
	Class	Level
Highest score		
Average score		
Parent's Signature		

SECTION A (20 marks)

Question 1 to 10 carry 1 mark each. Question 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.

1. What is the value of the digit 7 in 970 523?

- (1) 70
- (2) 700
- (3) 7 000
- (4) 70 000

()

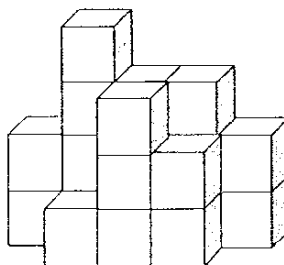
2. What is the product of 1 000 and 52?

- (1) 520
- (2) 5 200
- (3) 52 000
- (4) 520 000

()

3. The solid shown below is made up of 1-cm cubes.

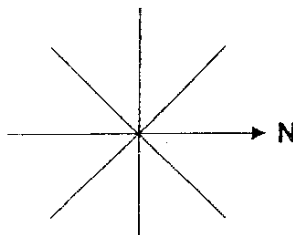
What is the volume of the solid?



- (1) 14 cm³
- (2) 16 cm³
- (3) 18 cm³
- (4) 20 cm³

()

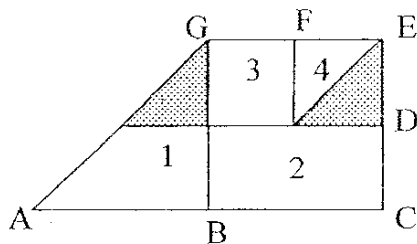
4. I was facing Northwest and I turned 90° anti-clockwise.
Which direction am I facing now?



- (1) Southwest
(2) Northeast
(3) East
(4) West

()

5. In the figure below, $AB = BC = CE = EG$.
D is the midpoint of CE and F is the midpoint of EG.
Which other area must be shaded so that $\frac{1}{2}$ of the figure is shaded?



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

()

6. Arrange the following fractions in ascending order.

$$\frac{5}{2}, \frac{11}{6}, 2\frac{2}{5}$$

(1) $\frac{5}{2}, 2\frac{2}{5}, \frac{11}{6}$

(2) $2\frac{2}{5}, \frac{5}{2}, \frac{11}{6}$

(3) $\frac{11}{6}, 2\frac{2}{5}, \frac{5}{2}$

(4) $\frac{11}{6}, \frac{5}{2}, 2\frac{2}{5}$

()

7. The value of the digit 2 in 539.721 is

(1) $\frac{2}{1000}$

(2) $\frac{2}{100}$

(3) $\frac{2}{10}$

(4) 2

()

8. Express 4.08 as a fraction in its simplest form.

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

(2) $\frac{12}{25}$

(3) $4\frac{4}{5}$

(4) $4\frac{2}{25}$

()

9. If $\triangle : \square = 3 : 4$, and $\square : \bigcirc = 5 : 7$, find the ratio of $\triangle : \bigcirc$.

(1) 15 : 28

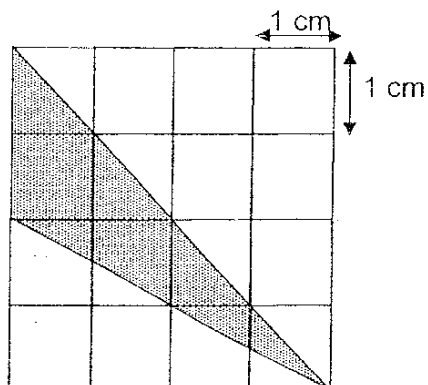
(2) 21 : 20

(3) 3 : 7

(4) 4 : 7

() 3

10. Find the area of the shaded triangle.



- (1) 8 cm²
- (2) 7 cm²
- (3) 6 cm²
- (4) 4 cm²

()

11. Find the difference between 80 547 and 3 557.

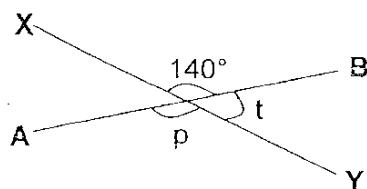
Round off your answer to the nearest hundreds.

- (1) 76 890
- (2) 76 900
- (3) 76 990
- (4) 77 000

()

12. In the figure below, AB and XY are straight lines.

The difference between $\angle p$ and $\angle t$ is _____°.



- (1) 140
- (2) 100
- (3) 60
- (4) 40

()

13. What is the least number of cookies that can be shared among 2, 6 or 7 children equally?
- (1) 14
 - (2) 21
 - (3) 42
 - (4) 84
- ()

14. Saree took $1\frac{1}{10}$ hours to prepare her lunch and spent 0.5 hours to finish the meal. How much time did she take in all?
- (1) 71 minutes
 - (2) 75 minutes
 - (3) 96 minutes
 - (4) 100 minutes
- ()

15. Charmaine bought a 2 kg fruit cake and a cheesecake.
- $\frac{3}{5}$ of the fruit cake weighed the same as $\frac{3}{4}$ of the cheesecake.
- What is the weight of the cheesecake?
- (1) 1 kg 600 g
 - (2) 1 kg 500 g
 - (3) 1 kg 200 g
 - (4) 400 g
- ()

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SECTION B (30 marks)

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

16. Arrange the numbers in descending order.

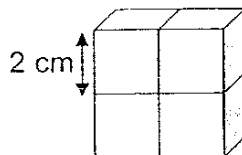
33 046, 29 470, 29 877, 32 084

17. Write 19 tenths and 23 thousandths in decimal.

Ans: _____

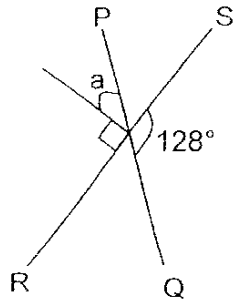
18. Mavis plans to make a cuboid of volume 112 cm^3 by stacking up some 2-cm cubes.

How many **more** cubes must she add to the figure below to make the cuboid?



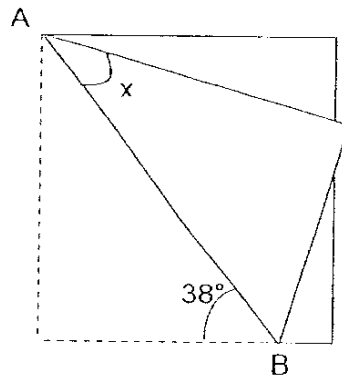
Ans: _____

19. In the diagram below, PQ and RS are straight lines.
Find $\angle a$.



Ans: _____°

20. A piece of rectangular paper was folded along AB as shown in the diagram below. Find $\angle x$.



Ans: _____°

21. Weiling used $2\frac{4}{5}$ m of ribbon and Sasha used $1\frac{1}{3}$ m of ribbon during their Art lesson. What was the total length of ribbon used by the two girls in metres?

Ans: _____ m

22. Express $18\frac{18}{1000}$ as a decimal.

Ans: _____

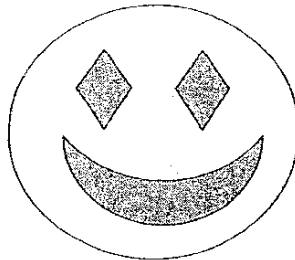
23. Find the value of 3.39×5 .
Round off your answer to 1 decimal place.

Ans: _____

24. Mrs Chan jogged 87.75 km in 9 days.
What was the average distance she jogged in a day?
Round off this figure to the nearest kilometres.

Ans: _____ km

25. Given that $\frac{3}{8}$ of the figure below is shaded, express the ratio of the unshaded area to the area of the figure.



Ans: _____

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Question 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. All diagrams are not drawn to scale. Answers in fractions or ratio must be expressed in the simplest form. Marks will be awarded for relevant working.

26. The sum of two numbers is 750.

One of the numbers is 60 less than the other number.

What is the bigger number?

Ans: _____

27. Find the value of $280 - (25 \times 2) + 10 - 100 \div 10$.

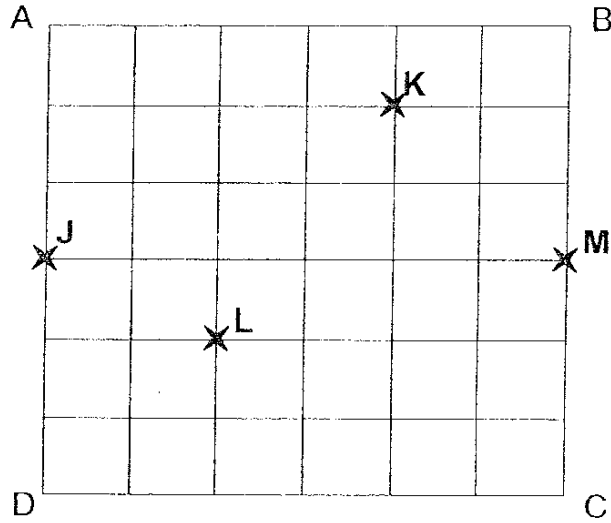
Ans: _____

28. 3 mugs and 2 saucers weigh $3\frac{1}{4}$ kg.

If 2 saucers weigh $1\frac{1}{4}$ kg, what is the mass of 5 mugs?

Ans: _____ kg

29. Study the 6 by 6 square grid below carefully.

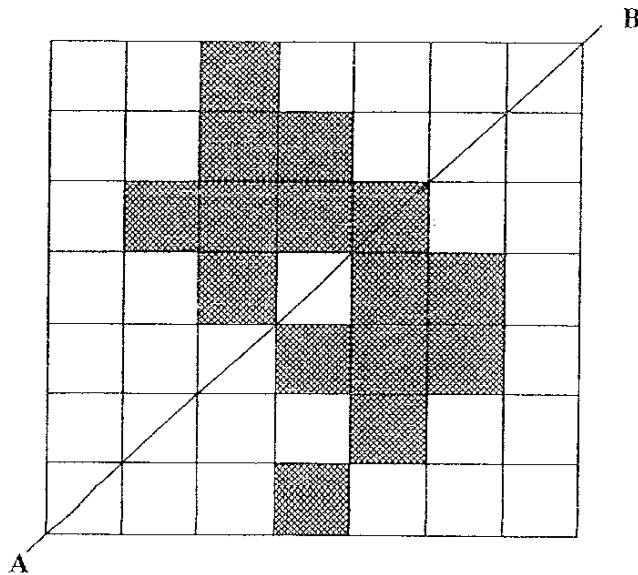


If I were to move three squares parallel to line AD,
 two squares perpendicular to line BC, and then one square parallel to line BC,
 I would end up at position K.

Where am I now?

Ans: _____

30. Shade two more unit squares so that the line AB is a line of symmetry.



31. Mr Osman spent \$900 which was $\frac{2}{3}$ of his salary.

If he had spent only $\frac{1}{5}$ of his salary, how much less would he have spent?

Ans: \$ _____

32. The perimeter of a square is $\frac{24}{25}$ m.

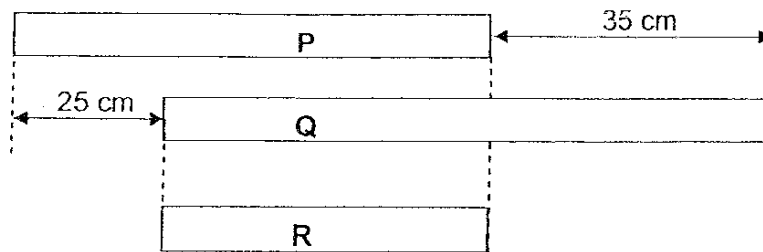
Find the length of the square in centimetres.

Ans: _____ cm

33. How many hundredths are there when $9\frac{3}{20}$ is added to 0.2?

Ans: _____

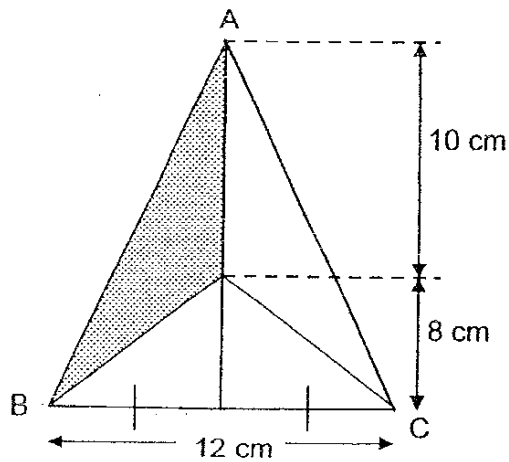
34. The diagram below shows three paper strips, P, Q and R.



Given that the total length of P, Q and R is 210 cm, find the ratio of the length of P to the length of R.

Ans: _____

35. Triangle ABC is an isosceles triangle.
Find the area of the shaded figure below.



Ans: _____ cm²

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SECTION C (50 marks)

For question 36 to 48, show your working clearly in the space provided below each question and write your answer with suitable units in the spaces provided. All diagrams are not drawn to scale. Answers in fractions or ratio must be expressed in the simplest form. Marks will be awarded for relevant working. The number of marks available is shown in brackets [] at the end of each question or part-question.

36. Phyllis and Siti had a total of 3 l of tea for sale.

After Phyllis sold $\frac{1}{2}$ of her amount of tea and Siti sold $\frac{3}{7}$ of her amount of tea, they had the same amount left.

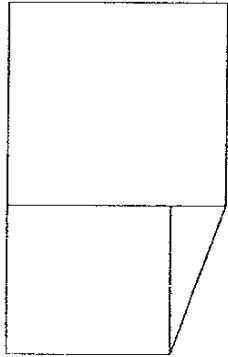
Siti sold another 200 ml of tea, how many millilitres of tea would she have left at the end?

Ans: _____ [3]

37. Ken is 48 years old now. $\frac{1}{4}$ of his age is equal to $\frac{1}{3}$ of Rachel's age.
What would be their total age in 10 years' time?

Ans: _____ [3]

38. The figure below is made up of two squares and a triangle.
 The perimeters of the big square and the small square are 112 cm and 64 cm respectively.
 What is the area of the triangle?



Ans: _____ [3]

39. $\square + \triangle + \triangle = \star + \star + \bigcirc + \bigcirc$

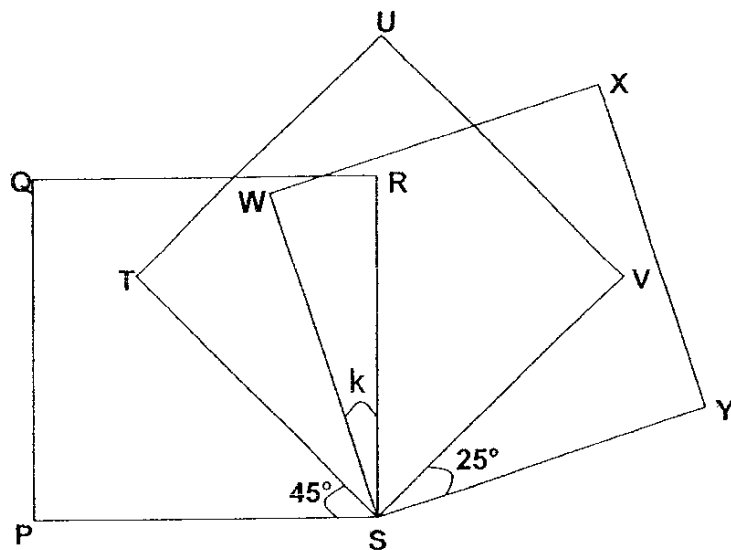
$\star + \square = 100$

$\star + \bigcirc = 50$

If the value of \bigcirc is 10, find the value of \triangle .

Ans: _____ [3]

40. The figure below shows three identical squares PQRS, STUV, and SWXY. Find $\angle k$.



Ans: _____ [3]

41. Janice and Elaine had a total of 290 stamps.
After Janice bought another 34 stamps and Elaine gave away half of her stamps, they both had the same number of stamps.
How many stamps did Janice have at first?

Ans: _____ [3]

42. Michelle and Gracie had different number of beads at first.

After Michelle gave Gracie $\frac{1}{4}$ of her beads, Gracie had more beads than her.

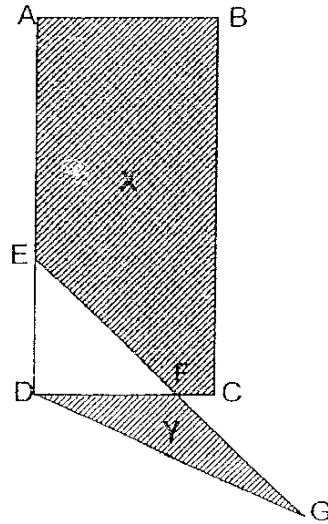
Gracie then gave Michelle $\frac{1}{4}$ of her new number of beads and

they had 54 beads each at the end.

What was the number of beads Michelle had at first?

Ans: _____ [4]

- 43 The figure below shows a rectangle ABCD overlapped with a triangle EDG. The total area of the rectangle ABCD and the triangle EDG is $1\,800\text{ cm}^2$. Given that the area of triangle EDG is $\frac{2}{7}$ of the area of rectangle ABCD, find the difference between the two shaded areas labeled X and Y.



Ans: _____ [4]

44. A tank, 20 cm long and 15 cm wide, has a height of 20 cm.
David pours 4 jugs and 8 pails of water into the tank and the height of the water level in the tank is 10 cm.
- a) Find the volume of the water in the tank.
 - b) If David needs another 20 jugs of water to fill the tank to the brim, how many **pails** of water are needed to fill the empty tank completely?

Ans: (a) _____ [1]

(b) _____ [3]

45. The total cost of 6 hamburgers and 4 cheese burgers is \$21.

A cheese burger costs 1.5 times as much as a hamburger.

- a) Find the cost of a hamburger.
- b) Find the cost of 400 cheeseburgers.

Ans: (a) _____ [3]

(b) _____ [2]

46. Amin, Ben and Chandra shared 8 boxes of marbles among themselves. Each box contained 65 marbles. Amin received 48 marbles while Chandra received 3 times as many marbles as the total number Amin and Ben received.
- How many marbles did Ben receive?
 - If Ben were to get the same number of marbles as Chandra, how many marbles must Chandra give to Ben?

Ans: (a) _____ [2]

(b) _____ [3]

47 Leah had \$22 less than Emma at first.

Leah spent $\frac{1}{6}$ of her money while Emma spent $\frac{1}{4}$ of her money at a fair.

If Emma had spent \$8 more than Leah,

- a) how much money did Leah spend?
- b) What was the total sum of money the girls had left after spending?

Ans: (a) _____ [2]

(b) _____ [3]

48. Adam and Ben each have some money.

If Adam spends \$4, the ratio of the amount of money Adam has to the amount that Ben has will be 3 : 5.

If Ben spends \$4, the ratio of the amount of money Adam has to the amount that Ben has will be 11 : 13.

How much money does each boy have?

Ans: _____ [5]

-End of Paper-

Please check your work carefully ☺

Setters: Adeline Khalik, Cheng Kim Hong,
June Low and Aubrey Ong

Raffles Girls' Primary School

Primary 5 Maths SA1 Exam (2007)

Answer Keys

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

16. 33046, 32084, 29877, 29470

17. 1.923

18. 10

19. 38°

20. 52°

21. $4\frac{2}{15}$

22. 18.018

23. 17.0

24. 24km

25. 5 : 8

26. $750 - 60 = 690$
 $690 \div 2 = 345$
 $345 + 60 = 405$

27. $280 - (25 \times 2) + 10 - 100 \div 10$
 $280 - 50 + 10 - 100 \div 10$
 $280 - 50 + 10 - 10$
 $230 + 10 - 10$
 $240 - 10$
230

$$28. \quad 3 \text{ mugs } 2 \text{ saucers} = 3\frac{1}{4}$$

$$3 \text{ mugs} = 3\frac{1}{4} - 1\frac{1}{4} = 2$$

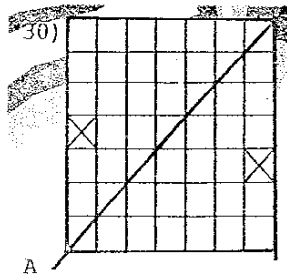
$$1 \text{ mug} = 2 \div 3 = \frac{2}{3}$$

$$5 \text{ mugs} = \frac{2}{3} \times 5 = \frac{10}{3}$$

$$= 3\frac{1}{3}$$

29. M

30.



$$31. \quad 900 \div 2 = 450$$

$$450 \times 3 = 1350$$

$$1350 \div 5 = 270$$

$$900 - 270 = \$630$$

$$32. \quad 100 \div 25 = 4$$

$$4 \times 24 = 96$$

$$96 \div 4 = 24\text{cm}$$

33. 935

$$34. \quad P = 75$$

$$Q = 85$$

$$R = 50$$

$$35 + 25 + 35 + 25 = 120$$

$$210 + 120 = 330$$

$$330 \div 3 = 110$$

$$110 - 35 = 75$$

$$110 - 60 = 50$$

$$75 : 50$$

$$15 : 10$$

$$3 : 2$$

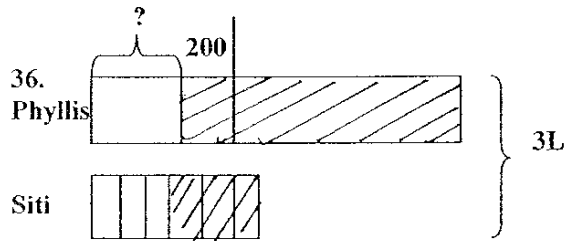
35. $12 \div 2 = 6$

$$\frac{1}{2} \times 10 \times 6 = 30$$

$$\frac{1}{2} \times 6 \times 8 = 24$$

$$\frac{1}{2} \times 18 \times 6 = 54$$

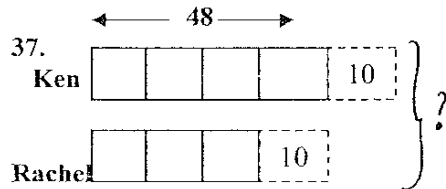
$$54 - 24 = 30\text{cm}^2$$



$$1u = 3000 \div 15 = 200$$

$$4u = 4 \times 200 = 800$$

$$\text{Siti's left} = 800 - 200 = 600\text{ml}$$



$$48 \div 4 = 12$$

$$7u = 12 \times 7 = 84$$

$$10 + 10 = 20$$

$$84 + 20 = 104 \text{ years old}$$

38. 1 side big = $112 \div 4 = 28$

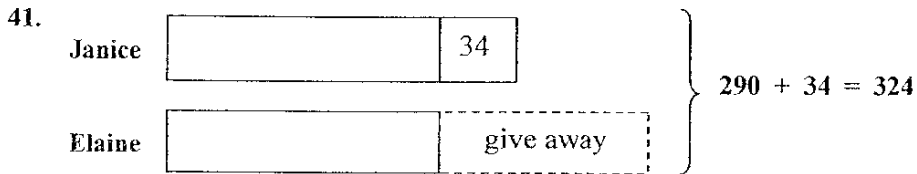
1 side small = $64 \div 4 = 16$

$$28 - 16 = 12$$

$$\text{Area of } \Delta = \frac{1}{2} \times 64 \times 12 = 384\text{cm}^2$$

39. $50 - 10 = 40$
 $100 - 40 = 60$
 $50 + 50 = 100$
 $100 - 60 = 40$
 $40 \div 2 = 20$

40. $\angle WSB = 90^\circ - 25^\circ = 65^\circ$
 $\angle TS = 90^\circ - 65^\circ = 25^\circ$
 $K = 90^\circ - 24^\circ - 45^\circ = 20^\circ$



$3u = 324$
 $1u = 324 \div 3 = 108$
 At first (Janice) = $108 - 34 = 74$

42. $3u = 54$
 $1u = 18$
 $2u = 2 \times 18$
 $= 36$

After Michelle give $\frac{1}{2}$ of her beads to Gracie
 $= 18 \times 2 = 36$
 $4u = 12 \times 4 = 48$

43. $7 + 2 = 9$
 $1800 \div 9 = 200$
 $Y = 200 \times 2 = 400$
 $X = 200 \times 7 = 1400$
 Difference = $1400 - 400 = 1000\text{cm}^2$

44a. $20 \times 15 \times 10 = 3000$
 44b. $20 - 4 = 16$
 $16 \div 8 = 2$
 $20 \div 2 = 10$
 $10 \times 2 = 20$

$$\begin{aligned}
 45a. \quad 24u &= \$21 \\
 2u &= \frac{21}{24} \times 2 \\
 &= 1.75
 \end{aligned}$$

$$\begin{aligned}
 45b. \quad 4 \text{ cheese} &= 6 \times \$1.75 \\
 &= \$10.50 \\
 400 \text{ cheese} &= \$10.50 \times 100 \\
 &= \$1050
 \end{aligned}$$

$$\begin{aligned}
 46a. \quad 8 \times 65 &= 520 \\
 520 \div 4 &= 130 \\
 130 - 48 &= 82
 \end{aligned}$$

$$\begin{aligned}
 46b. \quad 48 + 82 &= 130 \\
 130 \times 3 &= 390 \\
 390 - 82 &= 308 \\
 308 \div 2 &= 154
 \end{aligned}$$

$$\begin{aligned}
 47a. \quad \$22 \div 4 &= \$5.50 \\
 E &= 6u + \$5.50 \\
 L &= 4u \\
 \frac{1}{4} &= \frac{6}{24} \\
 \frac{1}{6} &= \frac{4}{24}
 \end{aligned}$$

$$\begin{aligned}
 2u &= \$2.50 \\
 1u &= \$1.25 \\
 4u &= \$5.00
 \end{aligned}$$

$$\begin{aligned}
 47b. \quad 24 \times 2 &= 48 \\
 6 + 4 &= 10 \\
 48 - 10 &= 38 \\
 38u &= \$47.50 \\
 \$22.00 - \$5.50 &= \$16.50 \\
 \$47.50 + 16.50 &= \$64.00
 \end{aligned}$$

$$\begin{aligned}
 48. \quad \text{Adam} &= \$22 \\
 \text{Ben} &= \$30
 \end{aligned}$$