HENRY PARK PRIMARY SCHOOL
2014 SEMESTRAL EXAMINATION 2
MATHEMATICS
PRIMARY 5

PAPER 1
(BOOKLET A)

Name: _____ ( ) Parent's Signature

Class: Primary 5_____ _____

Marks:

Paper 1	Booklet A	20
	Booklet B	20
Paper 2		60
Total		100

Total Time for Booklets A and B: 50 min

Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.
Shade your answers in the Optical Answer Sheet (OAS) provided.
You are **not** allowed to use a calculator.

Booklet A:
Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each.
For each of the questions, four options are given. One of them is the correct answer. Choose the correct answer (1, 2, 3 or 4). Shade the correct oval on the Optical Answer Sheet provided.

(20 marks)

1. $27 668 was collected in a donation drive.

   Round off $27 668 to the nearest thousand.

   (1) $27 000
   (2) $27 600
   (3) $27 700
   (4) $28 000 ( )

2. Find the value of $80 - 40 \div 5 \times 8$.

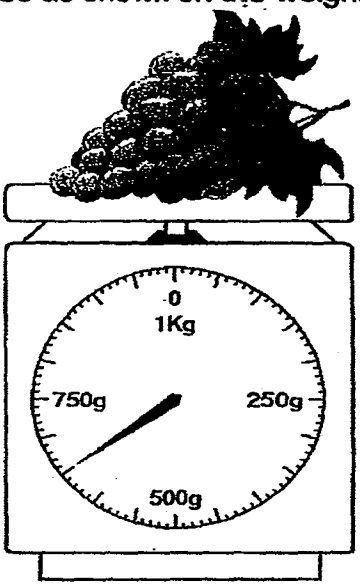
   (1) 1
   (2) 16
   (3) 64
   (4) 79 ( )

3. Which of the following is the same as 7 km 5 m?

   (1) 705 m
   (2) 7005 m
   (3) 7050 m
   (4) 7500 m ( )

(Go on to the next page)

4. What is the mass of the bunch of grapes as shown on the weighing scale in the figure?



(1) 550 g
(2) 600 g
(3) 650 g
(4) 700 g

( )

5. How many quarters are there in $3\frac{1}{2}$?

(1) 2
(2) 7
(3) 12
(4) 14

( )

6. What is the value of 2 hundreds, 7 tenths and 3 thousandths?

(1) 270.003
(2) 200.730
(3) 200.703
(4) 200.073

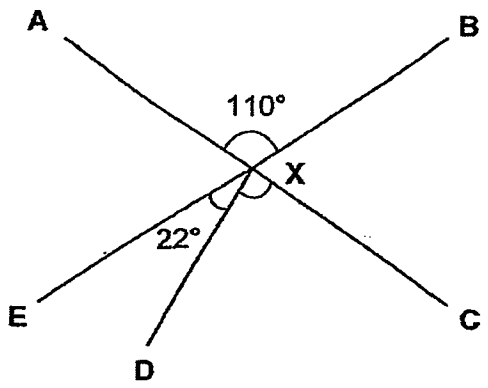
( )

(Go on to the next page)

7. 4.8 kg of sugar was needed to bake 300 cookies. How much sugar was needed to bake one cookie?

(1) 0.016 g
(2) 0.16 g
(3) 1.6 g
(4) 16 g ( )

8. In the figure, AXC and BXE are straight lines.
$\angle AXB = 110^\circ$ and $\angle EXD = 22^\circ$, find $\angle DXC$.



(1) 68°
(2) 70°
(3) 78°
(4) 88° ( )

(Go on to the next page)

9. The ratio of the number of girls to the number of boys in class 5E is 2 : 5. Given that there are 42 children altogether, how many more boys than girls are there in the class?

(1) 6
(2) 12
(3) 18
(4) 30 ( )

10. Miss Ng bought a box of 25 muffins. 11 of them were chocolate muffins and the rest were blueberry muffins. What percentage of the muffins were blueberry muffins?

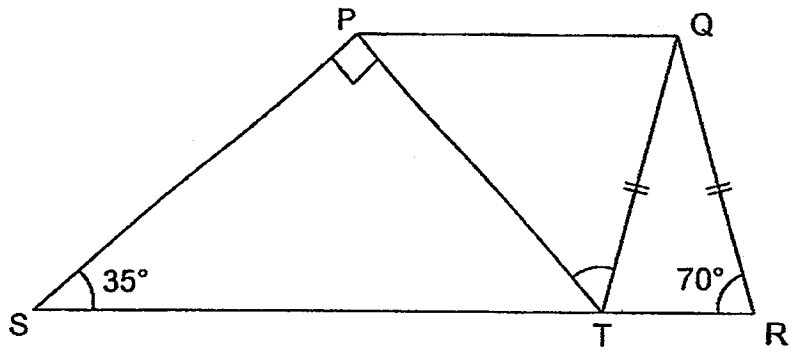
(1) 11%
(2) 14%
(3) 44%
(4) 56% ( )

11. Jessica bought 9.25 m of ribbon. She used 0.355 m of ribbon to tie a gift box. How much ribbon was left after tying 20 such gift boxes?

(1) 0.71 m
(2) 2.15 m
(3) 7.10 m
(4) 8.54 m ( )

(Go on to the next page)

12. In the figure below, PQRS is a trapezium and QR = QT.
Find $\angle PTQ$.



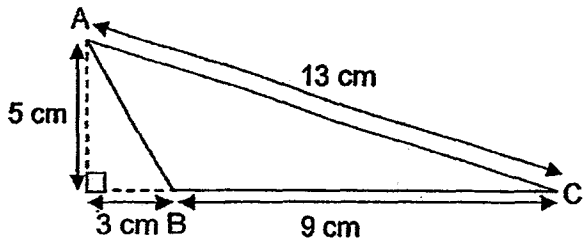
(1) 35°
(2) 40°
(3) 55°
(4) 60° ( )

13. 10 : ? : 14 = 15 : 6 : 21.
What is the missing number in the box?

(1) 0
(2) 2
(3) 3
(4) 4 ( )

(Go on to the next page)

14. What is the area of triangle ABC as shown in the figure?



(1) 22.5 cm^2

(2) 30 cm^2

(3) 32.5 cm^2

(4) 58.5 cm^2 ( )

15. At a fruit stall, $\frac{2}{5}$ of the number of mangoes is the same as $\frac{1}{4}$ of the number of pears. What fraction of the fruits are mangoes?

(1) $\frac{5}{8}$

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

(3) $\frac{5}{13}$

(4) $\frac{8}{13}$ ( )

(Go on to Booklet B)

HENRY PARK PRIMARY SCHOOL
2014 SEMESTRAL EXAMINATION 2
MATHEMATICS
PRIMARY 5

PAPER 1
(BOOKLET B)

Name: _____ ( )

Class: Primary 5_____

/ 20

Total Time for Booklets A and B: 50 min

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Write your answers in this booklet.

You are **not** allowed to use a calculator.

Booklet B:
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)

---

16. Write nine hundred and two thousand, two hundred and three in numerals.

Do not write in this space

Ans: _____

17. A jug contains 1.25 litres of milk. Wayne pours 350 mℓ of milk from the jug into a cup. How much milk is left in the jug? Leave your answer in millilitres.

Ans: _____ mℓ

(Go on to the next page)

18. $\frac{1}{2}$ kg of rice is packed equally into 4 bags. How much rice is there in each bag?

Do not write in this space

Ans: _____ kg

19. A number has 3 decimal places. When it is rounded off to the nearest hundredth, it is 1.07. What is the greatest possible value of the number?

Ans: _____

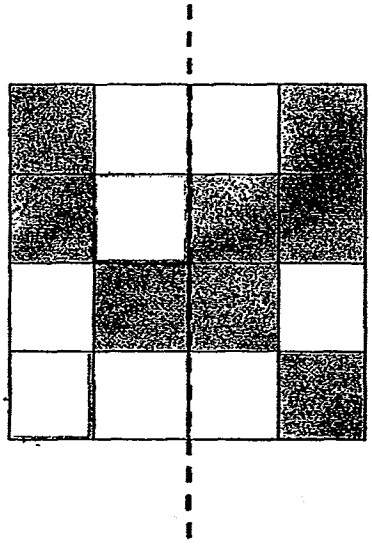
(Go on to the next page)

20. A coil of rope was cut equally into 600 pieces. Each piece of rope measured 13.5 cm. What was the original length of the coil of rope in metres?

Do not write in this space

Ans: _____ m

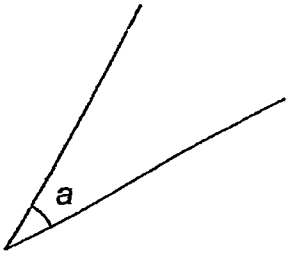
21. The figure below is made up of squares. Shade two more squares so that the dotted line is a line of symmetry.



(Go on to the next page)

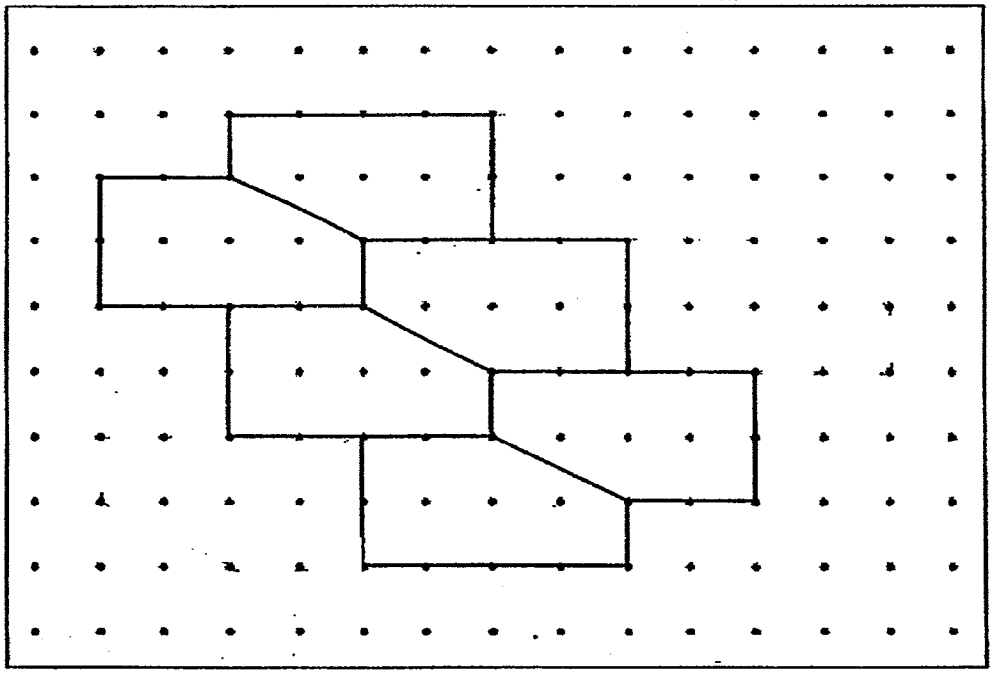
22. Measure $\angle a$.

Do not write in this space



Ans: _____°

23. The pattern in the box shows part of a tessellation. Extend the tessellation by drawing **two** more unit shapes in the space provided in the box.



(Go on to the next page)

24. Mr Chua drove 1715 km in 7 days. What was the average distance he drove per day?

Do not write in this space

Ans: _____ km

25. The ratio of the Reina's savings to Samantha's savings is 3 : 4. The ratio of Samantha's savings to Tina's savings is 4 : 7. What is the ratio of Reina's savings to Tina's savings?

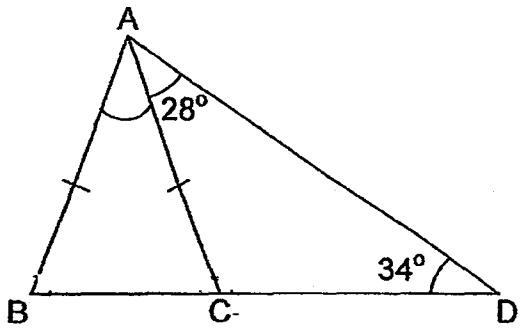
Ans: _____

(Go on to the next page)

Questions 26 to 30 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)

26. In the figure below, ABC is an isosceles triangle.
$\angle CAD = 28°$ and $\angle ADC = 34°$. Find $\angle BAC$.



Ans: _____ °

Do not write in this space

27. A school bus can take a maximum of 40 people in a trip. There are 350 students and 18 teachers going for a CCA trip. What is the minimum number of buses that must be booked?

Ans: _____

(Go on to the next page)

28. Mr Tan saves 14% of his salary each month. He saves $420 each month. How much is Mr Tan's monthly salary?

Do not write in this space

Ans: $ _____

29. Ken had $\frac{5}{9}$ as much money as Larry. Ken spent $\frac{3}{5}$ of his money and Larry spent twice as much as Ken. What fraction of Larry's money was left? Give your answer as a fraction in its simplest form.

Ans: _____

(Go on to the next page)

30. Mrs Fields had an equal mass of flour and sugar at first. After she used 33.2 kg of sugar, the mass of flour became 6 times as much as the mass of sugar left. What was the mass of sugar left?

Do not write in this space

Ans: _____ kg

End of Paper 1

HENRY PARK PRIMARY SCHOOL
2014 SEMESTRAL EXAMINATION 2
MATHEMATICS
PRIMARY 5

PAPER 2

Name: _____ ( )

Class: Primary 5_____

/ 60

Time for Paper 2: 1 h 40 min

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Answer all questions.

Show your working clearly as marks are awarded for correct working.

Write your answers in this booklet.

You are allowed to use a calculator.

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 space provided. For questions which require units, give your answers in the units stated.

(10 marks)

1.

Recipe
320 g flour
120 g butter
200 g sugar

Jenny uses the recipe above to make 30 cupcakes. She has 1 kg of flour, 500g of butter and 500 g of sugar. What is the maximum number of cupcakes she can make?

Ans: _____

Do not write in this space

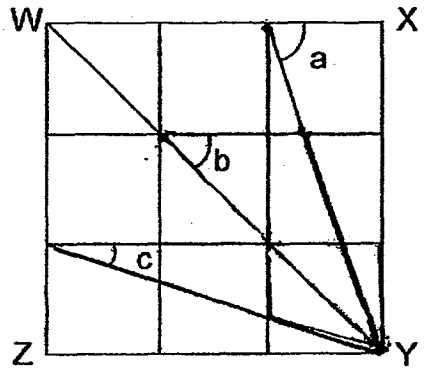
2. Mrs Heng bought 30 pens and 10 keychains at a bookshop. She paid $152.50 in total for her purchases. Given that each keychain cost $8.20, find the cost of one such pen.

Ans: $ _____

(Go on to the next page)

3. In the figure below, WXYZ is a square which is made up of 9 identical squares. Find the sum of $\angle a$, $\angle b$ and $\angle c$.

Do not write in this space



Ans: _____ °

4. A toy car cost $34. It cost half as much as a toy aeroplane. Sally bought 2 toy cars and a toy aeroplane. She gave the cashier $150. How much change did Sally receive?

Ans: $ _____

(Go on to the next page)

5. There were $\frac{3}{7}$ as many tennis rackets as badminton rackets in the PE storeroom. 33 badminton rackets were taken out and there were twice as many tennis rackets as badminton rackets in the end. How many tennis rackets were there in the storeroom?

Do not write in this space

Ans: _____

(Go on to the next page)

For 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)

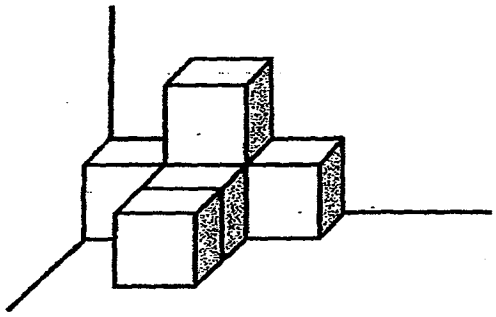
6. Apples in a fruit stall were placed equally in 25 baskets at first. 3 baskets were removed and the apples in these baskets were placed in the remaining 22 baskets. As a result, the number of apples in each remaining basket increased by 6. What was the total number of apples in all the baskets at first?

Do not write in this space

Ans: _____ [4]

(Go on to the next page)

7. The figure below is made up of 3-cm cubes. Sandy wants to use more 3-cm cubes to form the figure into a 12 cm by 12 cm by 9 cm cuboid. How many more 3-cm cubes will Sandy need in order to form the cuboid?



Do not write in this space

Ans: _____ [3]

(Go on to the next page)

8. A burger cost twice as much as a sandwich at a cafeteria. Mrs Tan spent $\frac{1}{4}$ of her money on some sandwiches and $\frac{1}{6}$ of the remainder on 2 burgers. How many sandwiches did Mrs Tan buy?

Do not write in this space

Ans: _____ [4]

9. Tank A and Tank B were filled to the brim with water. Tank A contained 8.5 litres more water than Tank B. Some water was removed from both tanks so that Tank A was $\frac{3}{5}$ full and Tank B was $\frac{4}{5}$ full. Given that there was 12.9 litres of water left in Tank A, how much water was removed from Tank B?

Do not write in this space

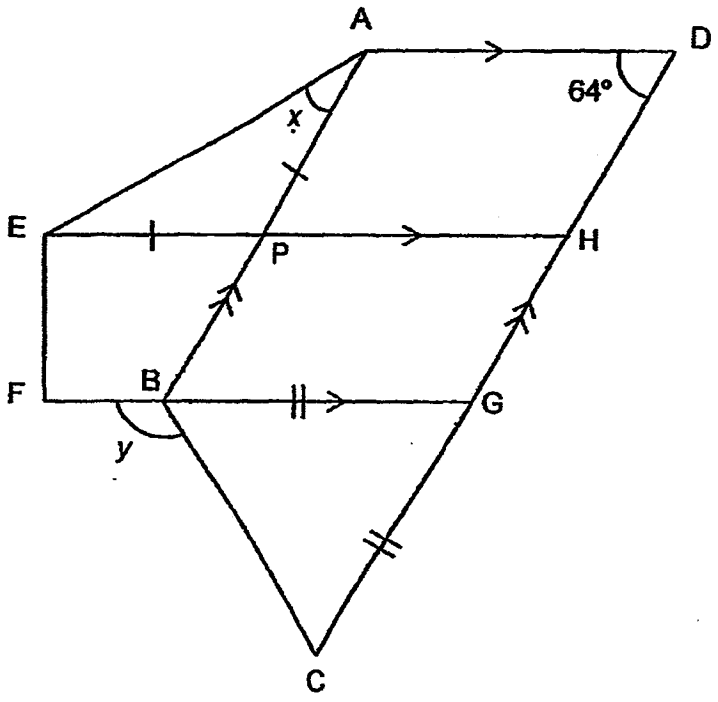
Ans: _____ [3]

(Go on to the next page)

10. In the figure below, ADHE, ADCB and EHGF are trapeziums. APE and BGC are isosceles triangles. $\angle ADH = 64°$.

(a) Find $\angle x$.

(b) Find $\angle y$.



Do not write in this space

Ans: (a)_____ [2]

(b)_____ [2]

(Go on to the next page)

11. Calvin, Edward and David sold some tickets for their school concert. Calvin sold $\frac{3}{7}$ of the total number of tickets. Edward and David sold the remaining tickets in the ratio 5 : 7. Given that Calvin sold 108 more tickets than Edward, how many tickets did the 3 of them sell altogether?

Do not write in this space

Ans: _____ [3]

(Go on to the next page)

12. Mrs Bala baked three types of pies. 46 of them were chicken pies and 125 were vegetable pies. She baked twice as many fruit pies as vegetable pies. What percentage of the pies Mrs Bala baked were vegetable pies?

Give your answer correct to 1 decimal place.

Do not write in this space

Ans: _____ [3]

(Go on to the next page)

13. At first, Jack, Ken and Leo spent a total of $2420. After Jack tripled his spending, Ken decreased his spending by $470 and Leo increased his spending by $150, the amount of money each boy spent became the same in the end.

Do not write in this space

(a) How much money did Jack spend in the end?

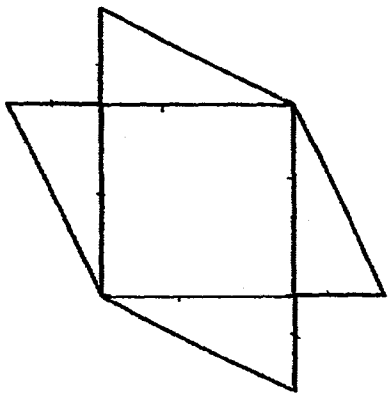
(b) How much money did Ken spend at first?

Ans: (a) _____ [3]

(b) _____ [2]

(Go on to the next page)

14. The figure is made up of a square and 4 identical right-angled triangles. The perimeter of the square is 48 cm. The height of each triangle is half its base. Find the area of the figure.



Do not write in this space

Ans: _____ [3]

15. Jerry spent \$92 on shoes and \$64 on pants. He then spent $\frac{2}{9}$ of his remaining money on groceries. After buying groceries, he gave $\frac{3}{7}$ of the money he had left to his sister. In the end, he was left with $\frac{2}{11}$ of the sum of money he had at first. How much money did he have at first?

Do not write in this space

Ans: _____ [5]

(Go on to the next page)

16. A briefcase with 5 books in it has a mass of 1.57 kg. When 3 more books and 7 files are added into the briefcase, the mass becomes 2.45 kg. Each book is 5 times as heavy as each file.

(a) What is the mass of each file?

(b) What is the mass of the briefcase when it is empty?

Do not write in this space

Ans: (a) _____ [3]

(b) _____ [2]

(Go on to the next page)

17. Diana is 2 kg heavier than Elaine. Elaine is 3 kg heavier than Joyce. Joyce is 8 kg lighter than Tim. The total mass of Tim and Joyce is 86 kg. What is the average mass of the 4 children?

Do not write in this space

Ans: _____ [4]

(Go on to the next page)

18. A factory baked 4230 cupcakes on Monday. 20% of them were chocolate cupcakes while the rest were cheese cupcakes. On Tuesday,the factory baked only chocolate cupcakes. 40% of all the cupcakes baked on both Monday and Tuesday were chocolate cupcakes.

(a) How many chocolate cupcakes did the factory bake on Monday?

(b) How many more cheese cupcakes than chocolate cupcakes were produced by the factory at the end of both days?

Do not write in this space

Ans: (a)_____ [2]

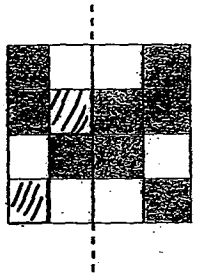
(b) _____ [2]

-END OF PAPER-

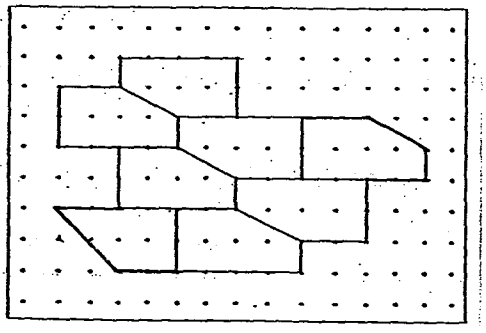
Setters: Ms Chin Lian Mei, Mrs Elaine Chua, Mr Jenfry Tseng, Mr Yip Yew Fei

Henry Park Primary School
2014 Semestral Examination 2
Mathematics
Primary 5

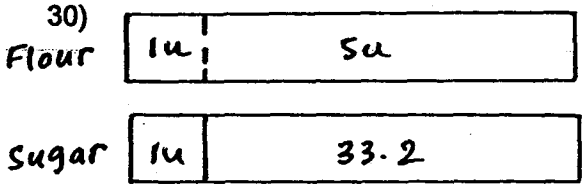
1) 4
2) 2
3) 2
4) 3
5) 4
6) 3
7) 4
8) 4
9) 3
10) 4
11) 2
12) 3
13) 4
14) 1
15) 3
16) 902 203
17) 900 ml
18) 1/8 kg
19) 1.074
20) 81 m
21)



22) 31 °
23)



24) 245 km
25) 3 : 7
26) 56 °
27) 10 buses
28) $3000
29) 1/3
30)



5units --> 33.2
1unit --> 1/5*33.2 = 6.64 kg

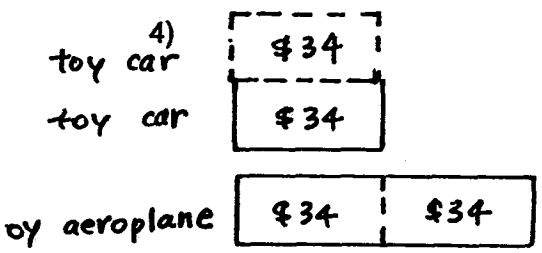
Paper 2

1) Since the ratio of sugar is the smallest as compared to flour and butter, we have to base on sugar to get the maximum number of cupcakes.
500/200 = 2.5
2.5*30 = 75 cupcakes

2) 10*$8.20 = $82
$152.50-$82 = $70.50
$70.50/30 = $2.35

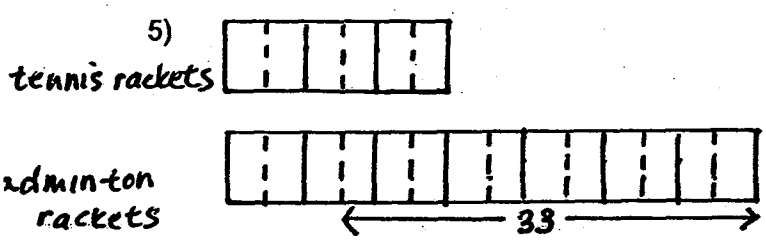
3) Angle b = 90/2 = 45 °
Angle a + Angle c = 90 °
Angle a + Angle b + Angle c = 45 + 90 = 135 °

4)



34*4 = $136
$150-$136 = $14

5)

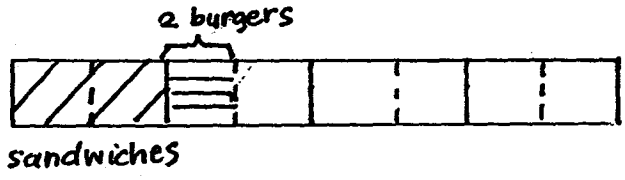


11u --> 33
6u --> 6/11*33 = 18 tennis rackets

6) 6*22 = 132
132/3 = 44
25*44 = 1100 apples at first

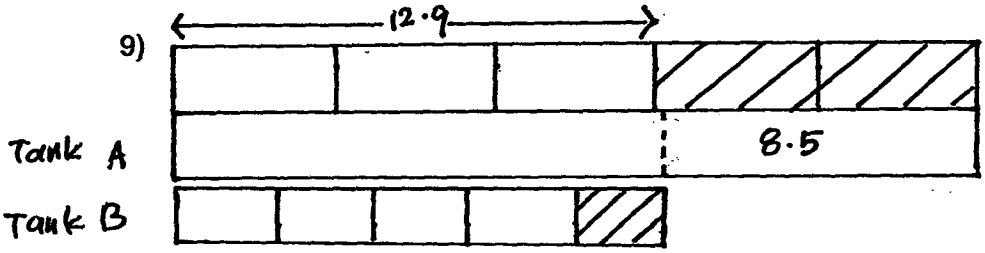
7) 12/3 = 4
9/3 = 3
4*4*3 = 48
48-6 = 42 more cubes

8)



1u --> 2 burgers = 4 sandwiches
2u --> 2*4 = 8 sandwiches

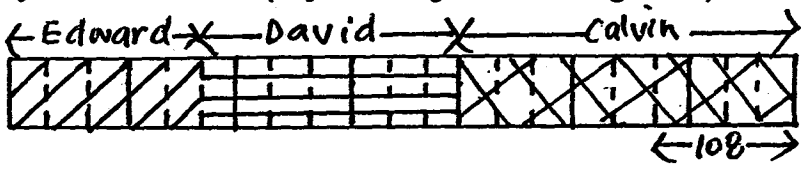
9)



3u --> 12.9 litres
5u --> 5/3*12.9 = 21.5 litres
21.5-8.5 = 13 litres
13/5 = 2.6 litres

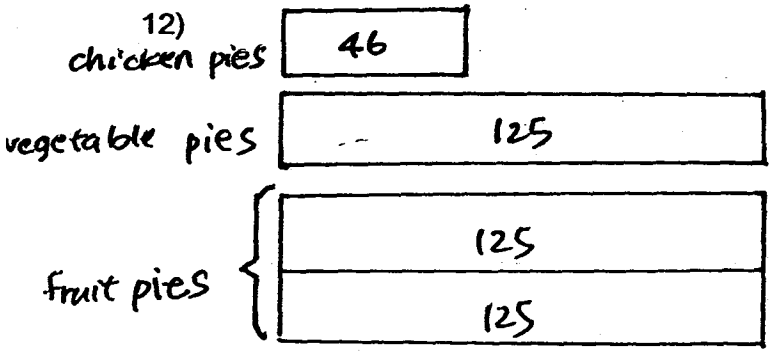
10a) x = 64/2 = 32 ° (sum of exterior angles)
b) .Angle BGC = 64 ° (corresponding angles)
Angle GBC = (180-64)/2 = 58 ° (base angles of isosceles triangles)
y = 180-58 = 122 ° (adjacent angles on a straight line)

11)



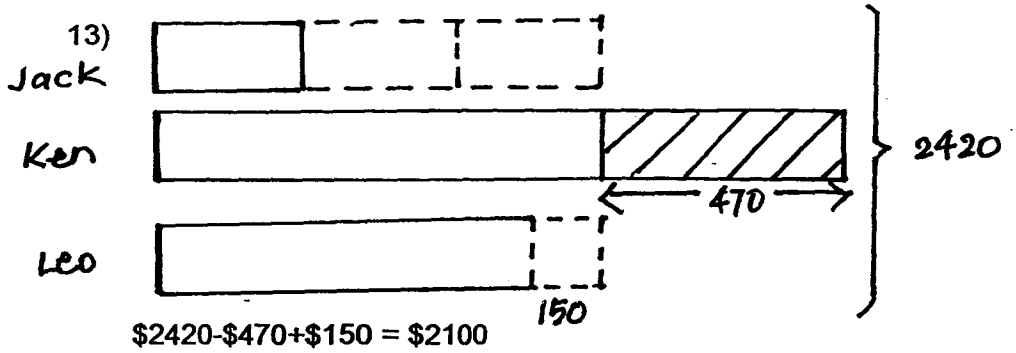
9units-5units = 4units
108/4 = 27
21*27 = 567 tickets

12)



125*3+46 = 421
125/421*100% = 29.7%

13)

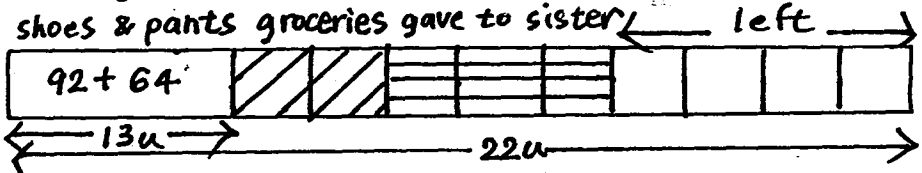


$2420-$470+$150 = $2100
$2100/7 = $300

a) $300*3 = $900
b) $900+$470 = $1370

14) 48/4 = 12 cm
12/2 = 6 cm
Area of 4 triangles = 1/2*12*6*4 = 144 cm²
Area of square = 12*12 = 144 cm²
Area of figure = 144+144 = 288 cm²

15)



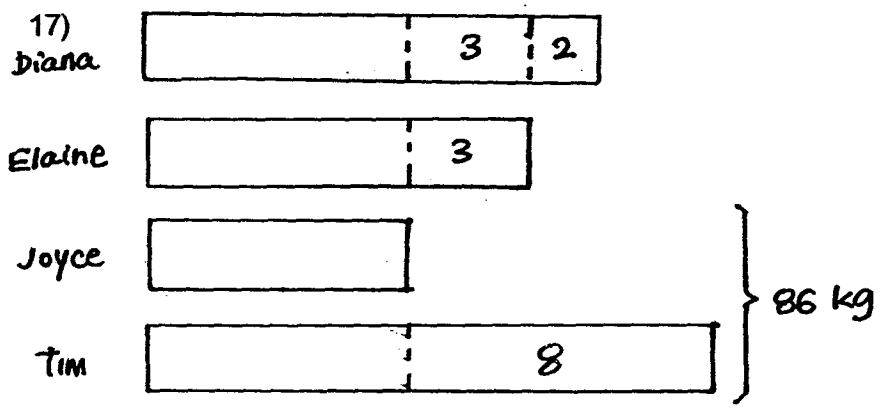
22units-9units = 13units
13units --> $92+$64 = $156
22units --> 22/13*156 = $264

16) 3*5 = 15
15+7 = 22
2.45-1.57 = 0.88 kg

a) 1 file --> 0.88/22 = 0.04 kg
1 book --> 0.04*5 = 0.2 kg
5 books --> 5*0.2 = 1 kg

b) 1.57-1 = 0.57 kg

17)



86*2 = 172 kg
172/4 = 43 kg

18a) 20/100*4230 = 846 chocolate cupcakes
4230-846 = 3384 cheese cupcakes
60% --> 3384
40% --> 40/60*3384 = 2256 chocolate cupcakes
b) 3384-2256 = 1128 more cheese cupcakes