



Anglo-Chinese School (Primary)

MID-YEAR EXAMINATION 2014
MATHEMATICS
PAPER 1 (BOOKLET A)
PRIMARY FIVE

Name: _____ () Class: Primary 5 ____

Date: 9 May 2014

Duration of Booklets A & B: 50 min

INSTRUCTIONS TO CANDIDATES

1. This question paper consists of 8 printed pages, including the cover page.
2. Do not turn this page until you are told to do so.
3. Follow all instructions carefully.
4. Shade your answers on the Optical Answer Sheet (OAS) provided.
5. You are not allowed to use a calculator.

Questions 1 to 10 carry 1 mark each. Question 11 to 15 carry 2 marks each.
Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the
Optical Answer Sheet (OAS). (20 marks)

1. In the number 4 056 293, the digit 5 is in the _____ place.
- 1) hundreds
 - 2) thousands
 - 3) ten thousands
 - 4) hundred thousands
2. The number of spectators at a football match is 140 000 when rounded off to the nearest 1 000 spectators. Which one of the following is the possible number of spectators at the match?
- 1) 139 000
 - 2) 139 450
 - 3) 140 490
 - 4) 140 510
3. 6 children shared $\frac{2}{3}$ of a pie. What fraction of the pie did each child get?
- 1) $\frac{1}{9}$
 - 2) $\frac{2}{9}$
 - 3) $\frac{1}{6}$
 - 4) $\frac{1}{3}$

4. Caleb has \$400. He spent $\frac{2}{5}$ of it on a pair of shoes and \$60 on a bag.
How much money did he spend in all?

- 1) \$ 160
- 2) \$ 180
- 3) \$ 220
- 4) \$ 340

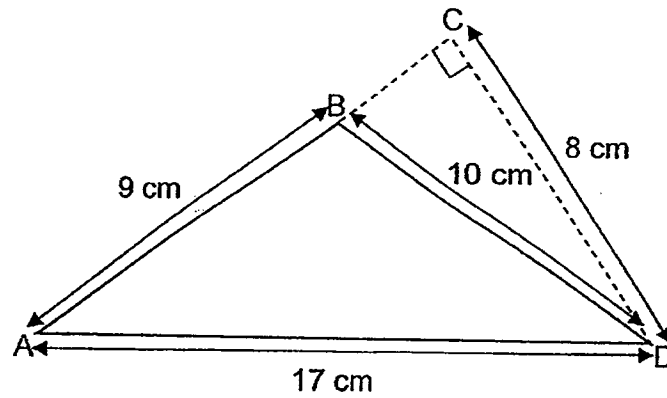
5. $18 : 33 = 24 :$?
What is the missing number in the box?

- 1) 39
- 2) 44
- 3) 51
- 4) 57

6. Find the value of $100 - 46 \div 2 + 7$.

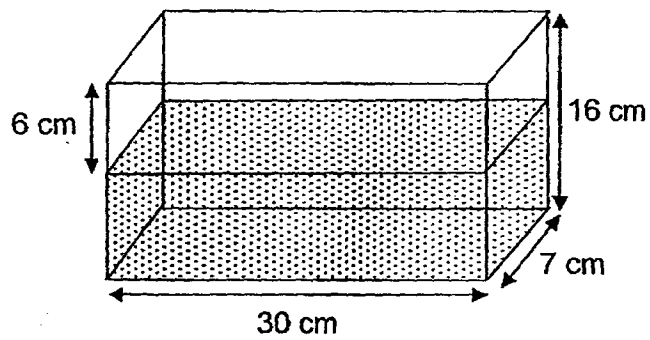
- 1) 6
- 2) 34
- 3) 70
- 4) 84

7. The figure below is not drawn to scale. $AB = 9\text{ cm}$, $AD = 17\text{ cm}$ and $BD = 10\text{ cm}$. Find the area of the triangle ABD.



- (1) 85 cm^2
- (2) 45 cm^2
- (3) 36 cm^2
- (4) 24 cm^2

8. A container is filled with some water as shown below. How much more water is needed to fill the container completely?



- 1) $1\,260\text{ cm}^3$
 - 2) $1\,680\text{ cm}^3$
 - 3) $2\,100\text{ cm}^3$
 - 4) $3\,360\text{ cm}^3$
9. Elwin saves \$93 a month. How much will he save in 3 years?
- 1) \$ 279
 - 2) \$ 1 116
 - 3) \$ 2 790
 - 4) \$ 3 348

10. There were 1 050 children, women and men at the museum. There were 54 more children than women and twice as many men as women. How many women were there?

- 1) 249
- 2) 303
- 3) 498
- 4) 996

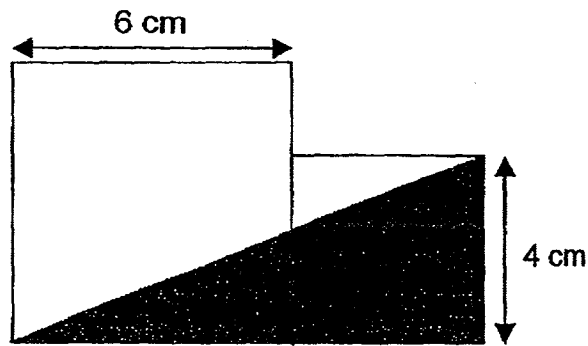
11. Melvin had 256 jelly beans. He gave $\frac{1}{4}$ of them to Roger and $\frac{5}{8}$ of it to Dylan. How many jelly beans did he have left?

- 1) 32
- 2) 64
- 3) 96
- 4) 160

12. The ratio of the number of Ernest's stamps to the number of Peter's stamps was 2 : 5. After Ernest gave $\frac{1}{4}$ of his stamps to Peter, he was left with 51 stamps. How many stamps did Peter have in the end?

- 1) 17
- 2) 51
- 3) 187
- 4) 238

13. The figure is made up of 2 squares of different sizes. Find the area of the unshaded portion.



- 1) 20 cm^2
2) 32 cm^2
3) 36 cm^2
4) 62 cm^2
14. Joanne and Lola shared 39 beads such that Joanne received 3 more beads than Lola. Find the ratio of the number of Joanne's beads to that of Lola's.

- 1) 1 : 4
2) 7 : 6
3) 7 : 8
4) 15 : 13

15. The table below shows the parking charges of AB Shopping Mall. Vanessa parked her car at the carpark from 2.40 p.m. to 4.55 p.m. on the same day. How much did Vanessa pay for parking her car?

PARKING CHARGES	
For the first hour	\$6
For every additional $\frac{1}{2}$ hour or part thereof	\$1.50

- 1) \$7.50
- 2) \$10.50
- 3) \$12
- 4) \$18



Anglo-Chinese School (Primary)

MID-YEAR EXAMINATION 2014
MATHEMATICS
PAPER 1 (BOOKLET B)
PRIMARY FIVE

Name: _____ () Class: Primary 5 _____

Date: 9 May 2014

Duration of Paper Booklets A & B: 50 min

Parent's/Guardian's signature

INSTRUCTIONS TO CANDIDATES

1. This question paper consists of 8 printed pages, including the cover page.
2. Do not turn this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. You are not allowed to use a calculator.

Section	Maximum Marks	Marks Obtained
Paper 1 Booklet A. Multiple-Choice Questions	20	
Paper 1 Booklet B. Short Answers: Part 1	10	
Paper 1 Booklet B. Short Answers: Part 2	10	
Total Marks	40	

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. Give your answers to the units stated and to its simplest form whenever necessary. (10 marks)

16. How many thousands are there in 4 967 000?

Answer: _____

17. How many fifths are there in $6\frac{1}{5}$?

Answer: _____

18. Complete the number pattern below.

Answer: _____

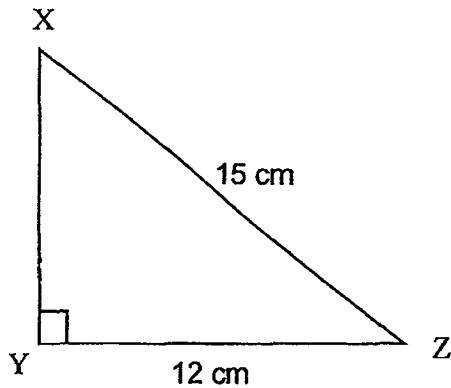
19. Mr Tan, his wife and 3 children went to a carnival. The ratio of the price of each adult ticket to the price of each child ticket was 5 : 3. If Mr Tan paid a total of \$57, what was the price of each adult ticket?

Answer: \$ _____

20. Ms Kelly uses $\frac{3}{4}$ cup of flour for every cake that she bakes. How many cups of flour will she use to bake 16 cakes?

Answer: _____

21. In the figure below, not drawn to scale, XYZ is a triangle. $YZ = 12$ cm and $XZ = 15$ cm. If the perimeter of the triangle $XYZ = 36$ cm, find the area of the triangle XYZ.



Answer: _____ cm^2

22. Xavier had 1 236 balloons. He sold them in packets of 12 balloons each. How much money would he receive if he sold each packet of balloons at \$8?

Answer: \$ _____

23. Eric is thrice as heavy as Freddy and Derrick is twice as heavy as Eric.
Eric is 26 kg heavier than Freddy. What is Derrick's mass?

Answer: _____ kg

24. The difference between $\frac{3}{4}$ of a number and $\frac{1}{2}$ of the same number is 10.
What is the number?

Answer: _____

25. The total volume of some metal balls is 512 cm^3 . These metal balls are melted and recast into 2-cm cubes. How many cubes are there?

Answer: _____

Questions 26 to 30 carry 2 marks each. Show all mathematical statements clearly in the space below each question and write your answers in the spaces provided. Give your answers to the units stated and to its simplest form whenever necessary. (10 marks)

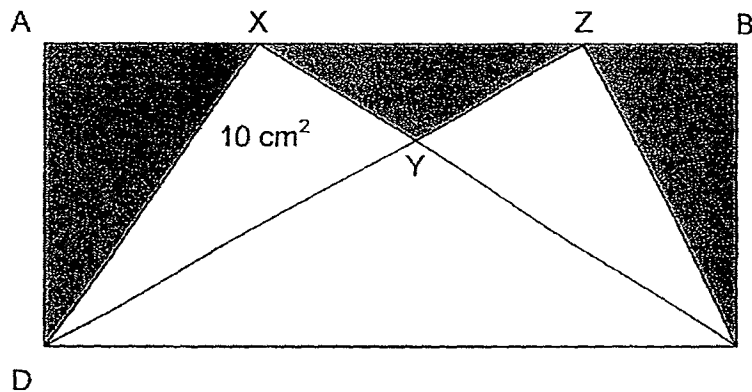
26. The ratio of the number of guinea pigs to the number of rabbits in a pet shop was $2 : 5$. After 3 rabbits were sold, the ratio of the number of guinea pigs to the number of rabbits became $1 : 2$. How many animals were there in the shop at first?

Answer: _____

27. There are between 60 and 100 marbles in a container. The marbles can be shared equally among 4 children. They can also be shared equally among 7 children. How many marbles are there in the container?

Answer: _____

28. In the figure below, not drawn to scale, the area of rectangle ABCD is 120 cm^2 . If the area of the triangle XYD is 10 cm^2 , find the total shaded area of the figure?

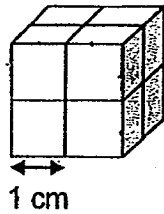


Answer: _____ cm^2

29. After Yeva travelled $\frac{1}{6}$ of a journey by bus and $\frac{1}{2}$ of the remaining journey by taxi, she was 1 250 m away from her destination. What was the distance of her whole journey?

Answer: _____ m

30. Mr Fong made the solid figure below using 1-cm cubes. How many more cubes must be added to it to make a 3-cm cube?



Answer: _____



Anglo-Chinese School (Primary)

MID-YEAR EXAMINATION 2014
MATHEMATICS
PAPER 2
PRIMARY FIVE

Name: _____ () Class: Primary 5 ____

Date: 9 May 2014

Duration of Paper 2: 1h 40min

Parent's/Guardian's signature

INSTRUCTIONS TO CANDIDATES

1. This question paper consists of 15 printed pages, including the cover page.
2. Do not turn this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. You are allowed to use a calculator.

Section	Maximum Marks	Marks Obtained
Paper 2 Section A. Short Answers	10	
Paper 2 Section B. Problem Sums	50	
Total Marks	60	

Questions 1 to 5 carry 2 marks each. Show your mathematical statements clearly in the space provided for each question and write your answers in the spaces provided. Give your answers to the units stated and to its simplest form whenever necessary. (10 marks)

1. $\frac{2}{9}$ of the cost of a dining table is equal to the cost of a chair.

If the dining table costs \$549, what is the cost of the chair?

Answer: \$ _____

A gift basket contained 90 chocolate bars and some sweets at a children's party. After $\frac{3}{5}$ of the chocolate bars and $\frac{5}{8}$ of the sweets were taken by the children, there was an equal number of chocolate bars and sweets left. Find the number of sweets in the gift basket at first.

Answer: \$ _____

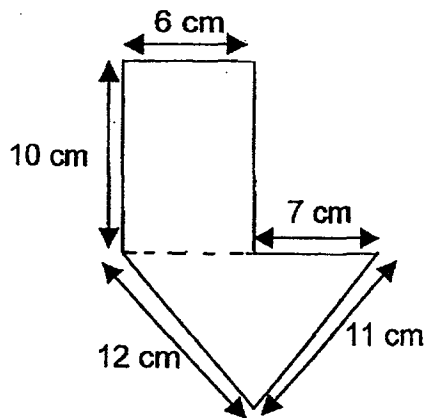
3. Mrs Lim is 41 years old and her daughter is 14 years old. How many years ago was Mrs Lim four times as old as her daughter?

Answer: _____

4. 4 apples and 5 pears cost \$6.20. 1 apple and 2 pears cost \$2.
Find the cost of 1 pear.

Answer: \$ _____

5. The figure below, not drawn to scale, is made up of a triangle and a rectangle. Find its perimeter.



Answer: _____ cm

For questions 6 to 18, show your steps 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.

The number of marks available is shown in brackets [] at the end of each question or part-question. (50 marks)

6. $\frac{2}{5}$ of the people at the cinema are adults. $\frac{4}{9}$ of the remainder are boys and the rest are girls. There are 2 250 girls. How many people are there at the cinema?

Answer: _____ [3]

7. Jane and Shirley each had an equal amount of money at first. After Jane gave \$250 to Shirley, the ratio of Jane's money to Shirley's money was 3 : 8. How much money did Jane have in the beginning?

Answer : _____ [3]

8. A crate has a mass of 45 kg when it is half-filled with oranges. Its mass is 35 kg when it is $\frac{1}{3}$ filled with oranges. What is the mass of the crate?

Answer: _____ [3]

9. For every mobile phone that Mr Ahmad sells, he earns \$35. He earns an extra \$8 if he sells 15 mobile phones. In the month of May, he earned \$1 774. How many mobile phones did he sell in May?

Answer: _____ [3]

10. There were a total of 120 chairs and tables in a furniture shop. There were 4 times as many chairs as tables. After 36 chairs and some tables were sold, there were 3 times as many chairs as tables left. How many tables were sold?

Answer: _____ [3]

11. A pen is sold for \$5. A pencil costs \$2 less than a pen. Mr Neo collected \$630 from the sale of pens and pencils at the end of a day. He sold thrice as many pens as pencils. How much more money did he collect from the sale of pens than from pencils?

Answer: _____ [4]

12. At a concert, there were $\frac{1}{2}$ as many men as women and $\frac{7}{12}$ as many children as adults. There were 70 fewer children than women. How many people were at the concert?

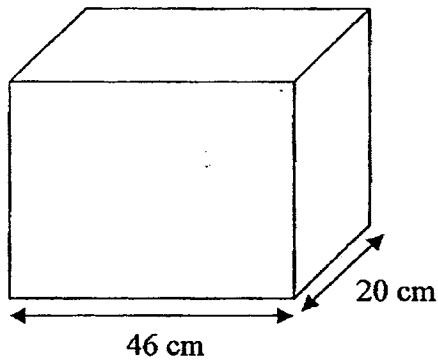
Answer : _____ [4]

13. Lena bought 4 similar blouses with $\frac{1}{2}$ of her money. She also bought a handbag which cost \$25 more than each blouse. Then she had \$68 left.
- (a) What fraction of her money did Lena spend on each blouse?
- (b) How much money did she have at first?

Answer : (a) _____ [1]

(b) _____ [3]

14. A rectangular fish tank, 46 cm long and 20 cm wide, was filled with water to its brim. After 8 scoops of water were removed from the fish tank, the tank was $\frac{1}{5}$ full. The volume of water in each scoop was $2\,300\text{ cm}^3$. What was the height of the fish tank?

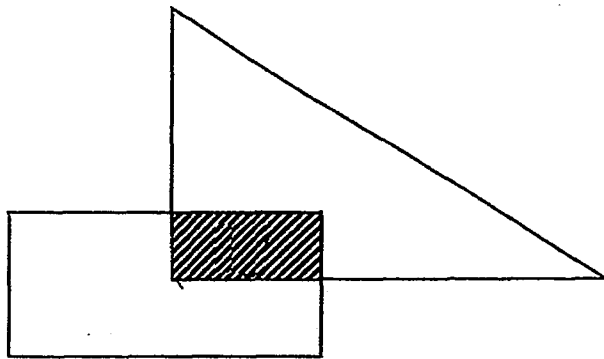


Answer: _____ [4]

15. In the figure below, the ratio of the area of the triangle to the area of the rectangle is $4 : 3$. The area of the triangle is 256 cm^2 .
 $\frac{1}{4}$ of the rectangle overlaps with the triangle.

Find

- (a) the area of the rectangle
(b) the area of the unshaded parts of the figure.



Answer: (a) _____ [1]
(b) _____ [3]

16. Alan, Bill and Carl shared \$372. After Alan spent $\frac{2}{5}$ of his share, Bill spent $\frac{1}{2}$ of his share and Carl spent $\frac{1}{3}$ of his share, the boys found they had the same amount of money left.

- (a) What is the ratio of Alan's share to Bill's share to Carl's share?
(Express your answer in its simplest form.)
- (b) How much did they spend altogether?

Answer: (a) _____ [2]

(b) _____ [3]

17. $\frac{3}{8}$ of the stamps in an album are local stamps. The rest are Japanese and Chinese stamps. The ratio of Japanese stamps to number of Chinese stamps is 7 : 3. If there are 80 more Japanese stamps than Chinese stamps, what is the total number of stamps in the album?

Answer: _____ [5]

18. The following figures are made up of small right-angled triangles.
A dot is placed at the corner of each small right-angled triangle.

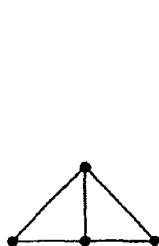


Figure 1

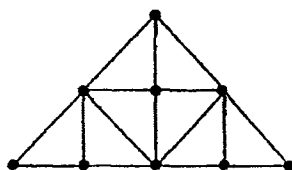


Figure 2

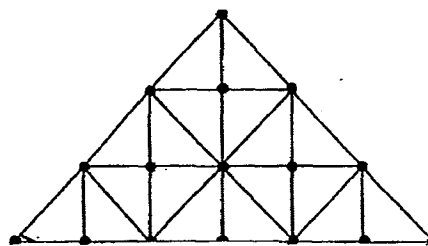


Figure 3

The total number of dots and small right-angled triangles in each figure is shown in the table below.

Figure	Total number of dots	Number of small right-angled triangles
1	4	2
2	9	8
3	16	18
4		

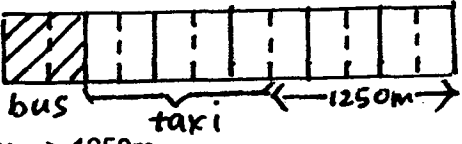
- Fill in the blanks in the table above for Figure 4. [1]
- Find the number of dots in Figure 49.
- Find the number of small right-angled triangles in Figure 15.

Answer: b) _____ [2]

c) _____ [2]

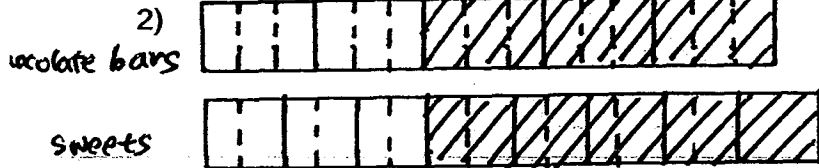
End of Paper 2

Anglo-Chinese School (Primary)
Mid-Year Examination 2014
Mathematics Primary 5

- 1) 3
- 2) 3
- 3) 1
- 4) 3
- 5) 2
- 6) 4
- 7) 3
- 8) 1
- 9) 4
- 10) 1
- 11) 1
- 12) 3
- 13) 2
- 14) 2
- 15) 2
- 16) 4967
- 17) 31
- 18) 133 692
- 19) \$15
- 20) 12 cups
- 21) 54 cm²
- 22) $1236/12 = 103$
 $103 \times \$8 = \824
- 23) 78 kg
- 24) $10 \times 4 = 40$
- 25) 64
- 26) G : R
 $2 : 5$
 $2 : 4$
 $1u \rightarrow 3$
 $7u \rightarrow 7 \times 3 = 21$ animals
- 27) Common multiple of 4 & 7 = 28
 $28 \times 3 = 84$
- 28) Triangle CYZ = 10 sq cm
 $20 + \text{CDY} + \text{shaded area} = 120$
 $\text{CDY} + \text{shaded area} = 120 - 20 = 100$
 $10 + \text{CDY} = 120/2 = 60$
 $\text{CDY} = 60 - 10 = 50$
Hence, shaded area = $100 - 50 = 50$ sq cm
- 29) 
 $5u \rightarrow 1250\text{m}$
 $12u \rightarrow 12/5 \times 1250 = 3000\text{m}$
- 30) $3 \times 3 \times 3 = 27$
 $27 - 8 = 19$ more cubes

Paper 2

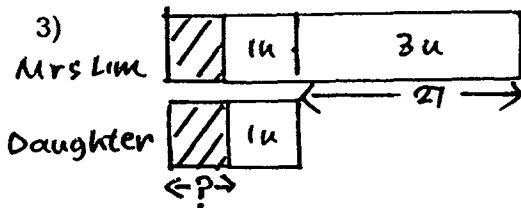
1) $2/9 * \$549 = \122



$90/5 = 18$

$18/3 = 6$

$16 * 6 = 96$ sweets



$27/3 = 9$

$14 - 9 = 5$ years ago

4) 1 apple + 2 pears \rightarrow \$2

4 sets,

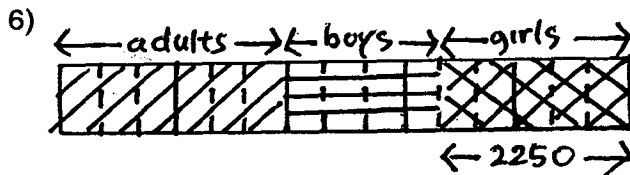
4 apples + 8 pears \rightarrow $\$2 * 4 = \8

4 apples + 5 pears \rightarrow \$6.20

Difference, 3 pears \rightarrow $\$8 - \$6.20 = \$1.80$

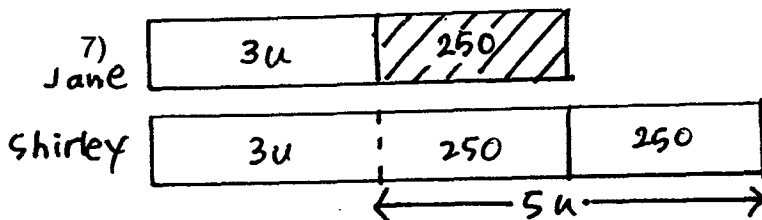
1 pear \rightarrow $\$1.80/3 = \0.60

5) $6 + 10 + 10 + 7 + 11 + 12 = 56$ cm



$5u \rightarrow 2250$

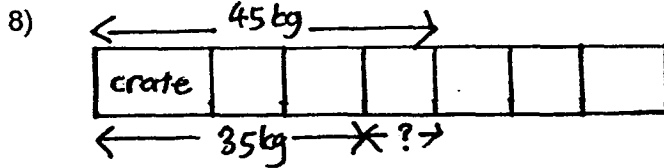
$15u \rightarrow 15/5 * 2250 = 6750$



$5u \rightarrow \$250 + \$250 = \$500$

$3u \rightarrow 3/5 * \$500 = \300

$\$300 + \$250 = \$550$

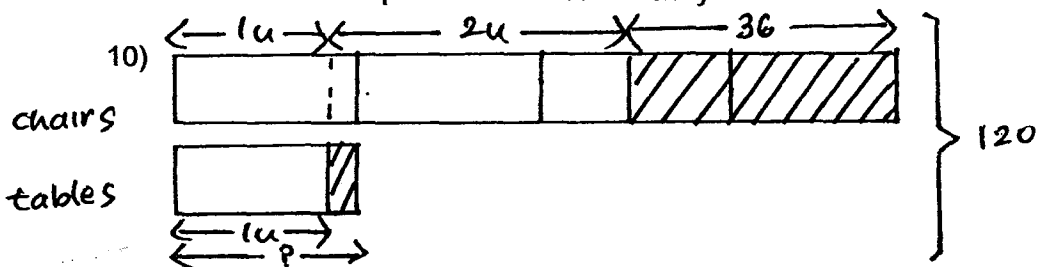


$$45 - 35 = 10\text{kg}$$

$$2 \times 10\text{kg} = 20\text{kg}$$

$$35\text{kg} - 20\text{kg} = 15\text{kg}$$

- 9) $15 \times \$35 = \525
 $\$525 + \$8 = \$533$
 $\$1774 / \$533 = 3 \text{ sets R175}$
 $\$175 / \$35 = 5$
 $3 \times 15 = 45$
 $45 + 5 = 50$ mobile phones were sold in May



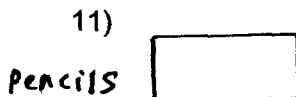
$$120 / 5 = 24 \text{ (number of tables)}$$

$$24 \times 4 = 96 \text{ (number of chairs)}$$

$$96 - 36 = 60 \text{ (number of chairs left)}$$

$$60 / 3 = 20 \text{ (number of tables left)}$$

$$24 - 20 = 4 \text{ tables were sold}$$



$$\$5 \times 3 = \$15$$

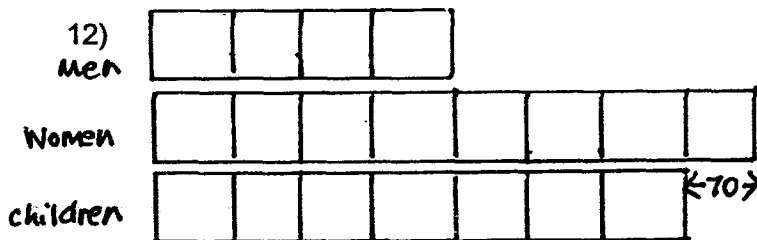
$$\$15 + \$3 = \$18$$

$$\$630 / \$18 = 35$$

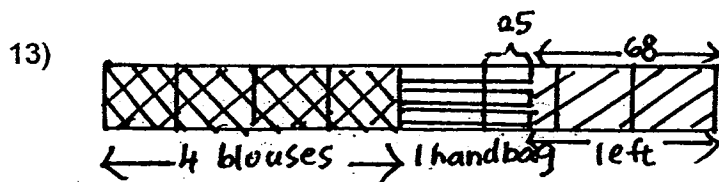
$$35 \times \$3 = \$105$$

$$\$105 \times 5 = \$525$$

$$\$525 - \$105 = \$420 \text{ more was collected from the sale of pens than from pencils.}$$



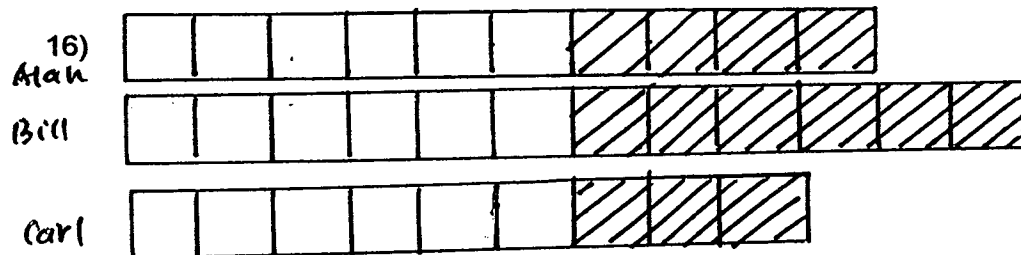
$$19 \times 70 = 1330 \text{ were at the concert.}$$



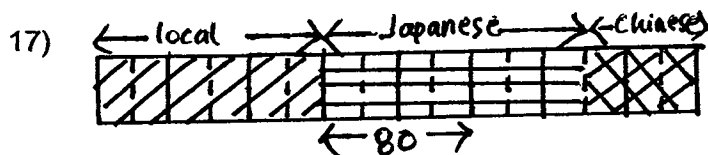
- a) $\frac{1}{8}$
 $\$25 + \$68 = \$93$
 $\$93/3 = \31
 b) $\$31 \times 8 = \248 at first

- 14) $2300 \times 8 = 18\,400 \text{ cm}^3$ (4 units)
 $18400/4 = 4600 \text{ cm}^3$
 $4600 \times 5 = 23\,000 \text{ cm}^3$ (volume of the tank)
 $23000/(46 \times 20) = 25 \text{ cm}$

- 15) $256/4 = 64 \text{ cm}^2$
 a) $64 \times 3 = 192 \text{ cm}^2$
 $192/4 = 48 \text{ cm}^2$
 b) $256 - 48 + 192 - 48 = 352 \text{ cm}^2$



- a) $10 : 12 : 9$
 b) $\$372/31 = \12
 $\$12 \times 13 = \156



$$7u - 3u = 4u$$

$$80/4 = 20$$

$$16 \times 20 = 320 \text{ stamps}$$

- 18a) 25, 32
 b) $50 \times 50 = 2500$
 c) $15 \times 15 \times 2 = 450$