



HENRY PARK PRIMARY SCHOOL  
2011 SEMESTRAL EXAMINATION 2  
MATHEMATICS  
PRIMARY 5

PAPER 1  
(BOOKLET A)

Name: \_\_\_\_\_ ( )

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 minutes

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.

The use of calculators is **NOT** allowed.

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. Divide 274 by 12. The quotient is \_\_\_\_\_.

- (1) 8
- (2) 10
- (3) 12
- (4) 22

2. What is  $11 + 12 \times 11 - 6$ ?

- (1) 71
- (2) 115
- (3) 137
- (4) 247

3. Which of the following is the same as 2401 m?

- (1) 2 km 41 m
- (2) 2 km 401 m
- (3) 24 km 1 m
- (4) 240 km 1 m

4. Which of the following fractions is smaller than  $\frac{3}{7}$ ?

- (1)  $\frac{5}{6}$
- (2)  $\frac{2}{3}$
- (3)  $\frac{3}{5}$
- (4)  $\frac{4}{11}$

5.  $\frac{5}{9} \div 3 = \square$

What is the missing value in the box?

(1)  $\frac{5}{27}$

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

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

(4)  $5\frac{2}{5}$

6. What is  $0.625 \times 200$ ?

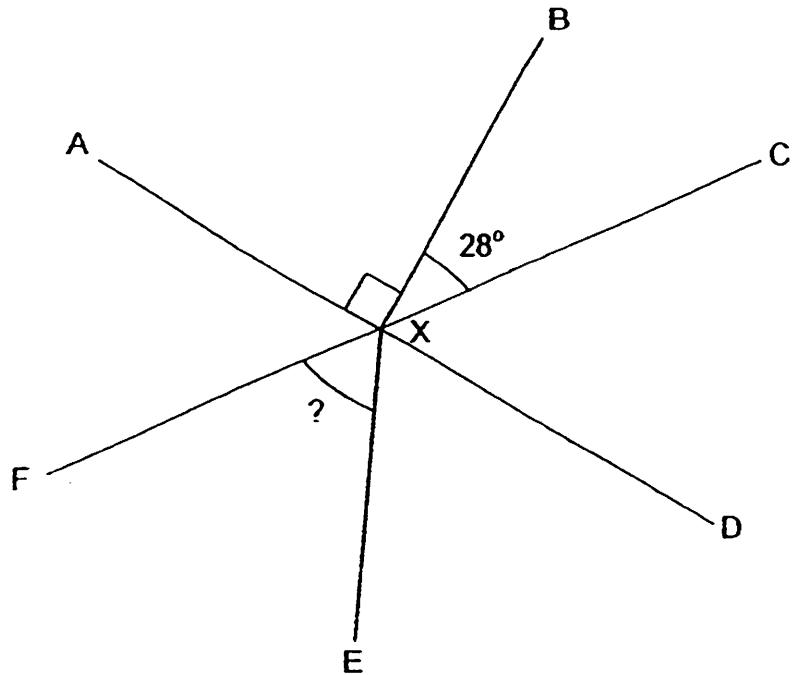
(1) 1.25

(2) 12.5

(3) 125

(4) 1250

7. In the diagram below,  $AXD$  and  $FXC$  are straight lines.  
Given that  $\angle FXE = \angle EXD$ , find the value of  $\angle FXE$ .



- (1)  $28^\circ$   
(2)  $31^\circ$   
(3)  $59^\circ$   
(4)  $62^\circ$
8. The average of seven numbers is 32.  
The sum of the first six numbers is 156.  
What is the seventh number?

- (1) 6  
(2) 68  
(3) 124  
(4) 224

9.  $6 : 9 : 21 = \boxed{A} : 12 : \boxed{B}$   
 What are the values represented by A and B?  
 (1) A = 8 ; B = 25  
 (2) A = 8 ; B = 28  
 (3) A = 9 ; B = 24  
 (4) A = 12 ; B = 28
10. In a class of 40 pupils, 15 pupils wear track shoes.  
 What percentage of the pupils do not wear track shoes?  
 (1) 25%  
 (2) 37.5%  
 (3) 60%  
 (4) 62.5%
11. Venli read a book from page 1 to 79 without skipping any pages.  
 What is the sum of all the page numbers he read?  
 (1) 3081  
 (2) 3121  
 (3) 3160  
 (4) 3200
12. Find the volume of a cube given that the total area of its 6 faces is 384 cm<sup>2</sup>.  
 (1) 8 cm<sup>3</sup>  
 (2) 64 cm<sup>3</sup>  
 (3) 128 cm<sup>3</sup>  
 (4) 512 cm<sup>3</sup>

13. Adeline had 8 m of cloth. She used  $\frac{1}{4}$  of it to make a skirt and  $\frac{3}{5}$  of the remainder to make a dress. How much cloth did she use to make the dress?
- (1)  $7\frac{3}{20}$  m
- (2) 2 m
- (3)  $3\frac{3}{5}$  m
- (4)  $4\frac{4}{5}$  m
14. The amount of water Jack had to the amount of water Bill had was in the ratio 7 : 5. After Jack had given 60 ℓ of water to Bill, Bill had three times the amount of water Jack had left. How much water did they have altogether?
- (1) 80 ℓ
- (2) 180 ℓ
- (3) 240 ℓ
- (4) 360 ℓ
15. Mrs Chong gave some money to her two daughters. Nicole received 58% of the money while Minnie received the rest. After Nicole spent \$48, both Nicole and Minnie had the same amount of money. How much money did Nicole and Minnie have in the end?
- (1) \$126
- (2) \$252
- (3) \$300
- (4) \$600



**HENRY PARK PRIMARY SCHOOL  
2011. SEMESTRAL EXAMINATION 2  
MATHEMATICS  
PRIMARY 5**

**PAPER 1  
(BOOKLET B)**

Name: \_\_\_\_\_ (    )

Class: Primary 5 \_\_\_\_\_

**Total Time for Booklets A and B: 50 minutes**

**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.**

**The use of calculator is NOT allowed.**

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.  $56 \times 49 = \square \times 4 \times 49$

Ans: \_\_\_\_\_

17. Felicia can fold 4 similar paper cranes in 200 seconds. At this rate, how long will she take to fold 36 similar cranes?

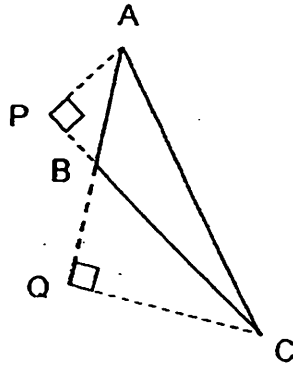
Ans: \_\_\_\_\_ s

18. A concert that lasted 3 h 35 min ended at 4.05 pm. At what time did the concert start?

Ans: \_\_\_\_\_ p.m.

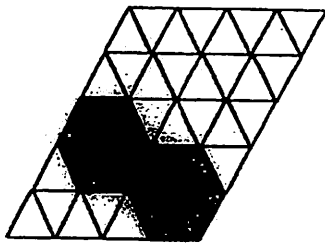


19. The figure below shows triangle ABC. Name the base that corresponds to the height CQ.



Ans: \_\_\_\_\_

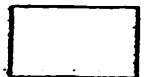
20. What fraction of the figure below is shaded?  
Give your answer in its simplest form.



Ans: \_\_\_\_\_

21. Find the sum of 48 tenths and 25 hundredths. Give your answer as a decimal.

Ans: \_\_\_\_\_

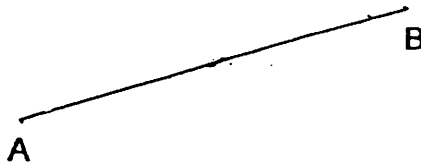


22. Find the value of  $10.2 \div 3$ . Give your answer as a decimal.

Ans: \_\_\_\_\_

23. In the figure below, AB is a straight line.

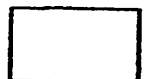
Draw a triangle ABC such that  $\angle ABC = 25^\circ$  and  $\angle BAC = 90^\circ$ .



24. Find the average of the following numbers:

36 , 42 , 10 , 18 , 24

Ans: \_\_\_\_\_



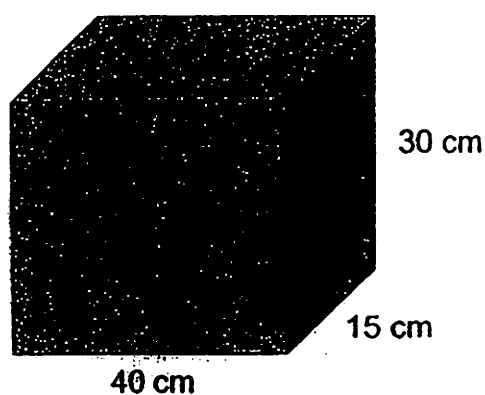
25. The length of three pieces of ropes is in the ratio 4 : 7 : 3. What is the difference in length between the shortest and the longest rope if the total length of the three ropes is 91 m?

Ans: \_\_\_\_\_ m



Questions 26 to 30 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

26. Rajeev wants to put wooden cubes into Container X as shown below. Each wooden cube has a side of 2 cm. What is the maximum number of such wooden cubes he can store in the container?

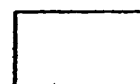


Container X

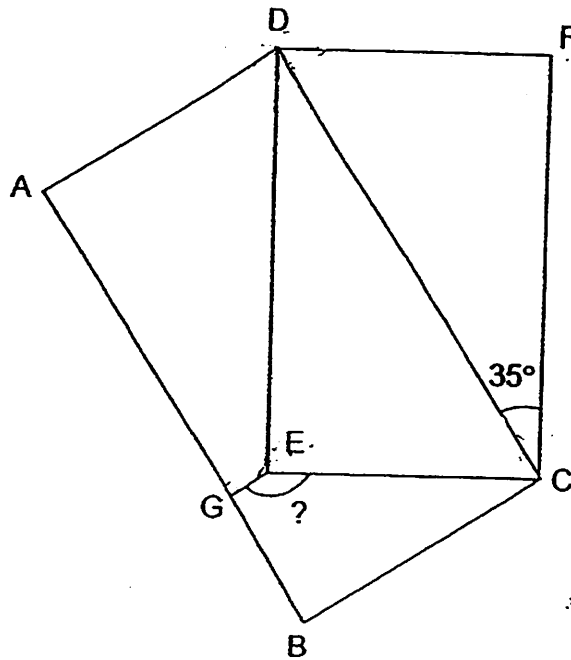
Ans: \_\_\_\_\_

27. The mass of a durian is  $\frac{4}{5}$  that of a watermelon. The durian is 220 g lighter than the watermelon. Find the total mass of the durian and the watermelon.

Ans: \_\_\_\_\_ kg



28. In the figure below, ABCD and CEDF are rectangles. Given that GECB is a trapezium, find the value of  $\angle GEC$ .



Ans: \_\_\_\_\_<sup>o</sup>

29. Chloe accidentally tore and threw part of her result slip as shown below. Her average score for the three subjects is 84. What is the largest possible difference between her Mathematics and Science marks if the maximum score for each subject is 100?

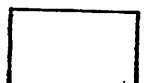
<u>Results</u>	
English	87
Mathematics	7
Science	8

Ans: \_\_\_\_\_

30. A massage chair costs \$525 cheaper after a discount of 25%. What is the cost of the chair after the discount?

Ans: \$ \_\_\_\_\_

End of Paper 1





**HENRY PARK PRIMARY SCHOOL  
2011 SEMESTRAL EXAMINATION 2  
MATHEMATICS  
PRIMARY 5**

**PAPER 2**

**Name:** \_\_\_\_\_ (    )

**Class:** Primary 5 \_\_\_\_\_

**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.**

**Write your answers in this booklet.**

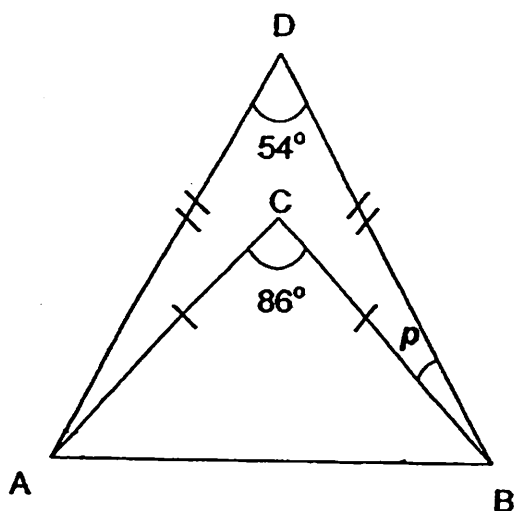
**The use of an approved calculator is expected, where appropriate.**

Questions 1 to 5 carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. ( 10 marks )

- A lift can take a maximum load of 840 kg before its alarm is triggered. Mr Tan wants to move some desks using the lift. The mass of each desk is 5 kg and Mr Tan's mass is 68 kg. What is the maximum number of desks Mr Tan can take with him into the lift without triggering the alarm?

Ans: \_\_\_\_\_

- In the diagram below, ABC and ABD are isosceles triangles. Calculate  $\angle p$ .



Ans: \_\_\_\_\_<sup>o</sup>



3. In a company, there are 128 Chinese, Malay and Indian workers. The ratio of the Chinese workers to Malay workers to Indian workers is 18 : 9 : 5. How many more Chinese workers are there than Malay and Indian workers?

Ans: \_\_\_\_\_

4. Master Chef Yip bought 88.6 kg of flour to bake 2200 cookies for his shop. Each cookie required 26 g of flour to bake. How much flour was left after baking the cookies?

Ans: \_\_\_\_\_ kg

5. Emma received \$4.80 as interest after depositing her savings in the bank for one year. If the bank pays 1.5% per annum as interest, how much money did Emma have altogether at the end of one year?

Ans : \$ \_\_\_\_\_



For questions 6 to 18, show your working clearly 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. Bala had some marbles.  $\frac{3}{8}$  of them were orange and the rest were purple. He gave away all of the orange marbles and sold  $\frac{3}{4}$  of the purple marbles. What fraction of his marbles did he have left?

Ans: \_\_\_\_\_ [3]

7. Cheryl and Serene have some money. If Cheryl gives Serene \$20, they will have the same amount of money. If Serene gives Cheryl \$25, Cheryl will have twice as much money as Serene. How much money does Serene have?

Ans: \_\_\_\_\_ [3]



8. A man had a piece of wire 11.08 m long. He cut off 7 pieces of wire each measuring 84 cm from the original piece of wire. He used the remaining wire to form a rectangle of length 1.7 m. Find the area of the rectangle. Give your answer in square metres.

Ans: \_\_\_\_\_ [3]

9. The average score of Carina and Delisa was 84. The average score of Delisa and Emma was 85. What was Carina's score if the average score of Carina and Emma was 93?

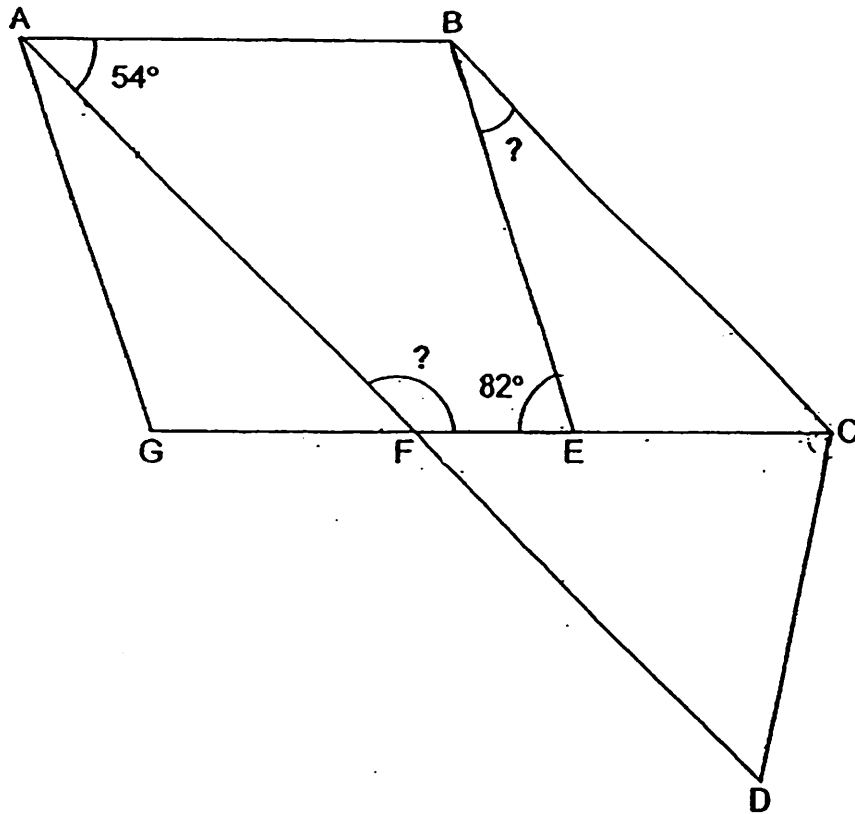
Ans: \_\_\_\_\_ [3]



10. The ratio of Max's savings to Ken's savings is 2 : 3. The ratio of Ken's savings to Larry's savings is 4 : 7. Larry saved \$1235 more than Max. Find the total savings Larry and Ken have.

Ans: \_\_\_\_\_ [3]

11. Given that ABCD is a trapezium, ABEG is a rhombus and GC is a straight line, find the values of
- (a)  $\angle CBE$
  - (b)  $\angle AFE$

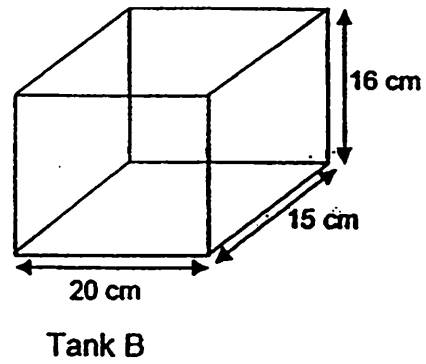
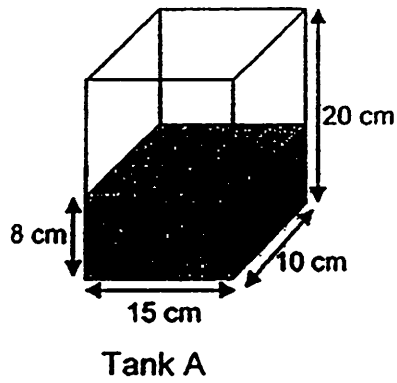


Ans: (a) \_\_\_\_\_

(b) \_\_\_\_\_



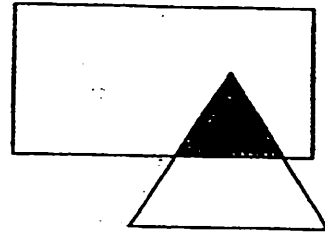
12. Tank A is filled with water to a height of 8 cm as shown in the figure below. All the water is then poured into Tank B. How much more water must be added to Tank B to fill it to a height of 13 cm? Give your answer in cubic centimetres.



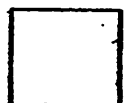
Ans: \_\_\_\_\_ [4]



13. The figure below is made up of a triangle and a rectangle. The area of the triangle is  $\frac{1}{3}$  the area of the rectangle. Given that  $\frac{2}{5}$  of the triangle is shaded, what fraction of the whole figure is unshaded? Give your answer in its simplest form.



Ans: \_\_\_\_\_ [4]



14. A teacher gave Abel, Belinda and Cathy some stamps in the ratio of 3 : 7 : 5. Belinda gave her share to her two sisters, Yani and Zann. Yani received  $\frac{1}{5}$  as many stamps as Zann who received 84 more stamps than Yani. How many stamps did the teacher give out at first?

Ans: \_\_\_\_\_ [4]



15. Daniel had four times as many toy cars as Jeremy at first. The two boys then bought the same number of toy cars each. After that, Jeremy had 54 toy cars, which was half the number of toy cars Daniel had. Find the number of toy cars each boy had at first.

Ans: Daniel: \_\_\_\_\_, Jeremy: \_\_\_\_\_ [4]



16. Mr Jamal has 4 boxes of apples labelled A, B, C and D at his fruit stall.

Box A contains  $\frac{5}{6}$  of the total number of apples in Boxes B, C and D.

Box B contains  $\frac{1}{5}$  of the total number of apples in Boxes C and D.

Box C contains  $1\frac{1}{2}$  times the number of apples in Box D.

(a) Box C contains 48 more apples than Box B. How many apples are there in Box A?

(b) Mr Jamal sold some apples from Box A such that the number of apples left in it was equal to that of Box D. How much did Mr Jamal collect if each apple was sold for \$0.35?

Ans: (a) \_\_\_\_\_ [3]

(b) \_\_\_\_\_ [2]



17. Mrs Teo spent \$340 on clothes, \$650 on food and gave 60% of the remainder to her son. She then saved the rest of her money, which amounted to 10% of her original sum of money. How much did she give her son?

Ans: \_\_\_\_\_ [5]



18. The figures below are made up of identical shaded and unshaded squares.

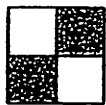


Figure 1

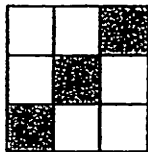


Figure 2

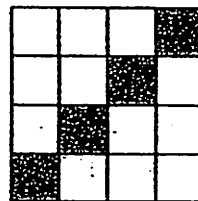


Figure 3

Figure	Number of shaded squares	Number of unshaded squares	Total number of squares
1	2	2	4
2	3	6	9
3	4	12	16
4	5	18	25
8	9	(a)	81

(a) Fill in the missing number in the table above. [1]

(b) Find the total number of squares in Figure 90.

(c) Which figure has 600 unshaded squares?

Ans: (b) \_\_\_\_\_ [2]

(c) Figure \_\_\_\_\_ [2]

END OF PAPER

# ANSWER SHEET

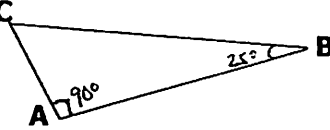
## EXAM PAPER 2011

SCHOOL : HENRY PARK  
SUBJECT : PRIMARY 5 MATHEMATICS

TERM : SA2

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

- 16)14      17)1800s      18)12.30p.m.      19)AB      20)3/10  
21)5.05      22)3.4      23) C      24)26  
25)28m      26)2100 cubes  
27)1.980kg      28)145°  
29)13      30)\$1575



### Paper 2

1)  $840\text{kg} - 68\text{kg} = 772\text{kg}$

$772\text{kg} \div 5\text{kg} = 154\text{R}2$

Ans: 154 desks

2)  $180^\circ - 54^\circ = 126^\circ$

$126^\circ \div 2 = 63^\circ$

$180^\circ - 86^\circ = 94^\circ$

$94^\circ \div 2 = 47^\circ$

$63^\circ - 47^\circ = 16^\circ$

3) Indian =  $4 \times 5 = 20$

Chinese =  $4 \times 18 = 72$

Malay =  $4 \times 9 = 36$

$18 + 9 + 5 = 32$

$32u \rightarrow 128$

$1u \rightarrow 128 \div 32 = 4$

$20 + 36 = 56$

$72 - 56 = 16$  workers

4)  $2200 \times 26\text{g} = 57200\text{g}$

$88.6\text{kg} - 57.2\text{kg} = 31.4\text{kg}$

6)  $1 - 3/8 = 5/8$

$1/4 \times 5/8 = 5/32$

8)  $7 \times 84 = 588\text{cm}$

$11.08 - 5.88 = 5.2$

$1.7 \times 2 = 3.4$

$5.2 - 3.4 = 1.8$

$1.8 \div 2 = 0.9$

$0.9 \times 1.7 = 1.53\text{m}^3$

5)  $\$4.80 \div 0.015 = \$320$

$\$320 + \$4.80 = \$324.80$

7)  $1u \rightarrow 25 + 20 + 20 + 25 = 90$

Serene  $\rightarrow 90 + 25 = \$115$

9) Carina and Delisa =  $84 \times 2 = 168$   
 Delisa and Emma =  $85 \times 2 = 170$   
 Carina and Emma =  $93 \times 2 = 186$   
 $170 + 168 = 338$   
 Delisa =  $338 - 186 = 152$   
 $152 \div 2 = 76$   
 $168 - 76 = 92$

11) a)  $180^\circ - 126^\circ = 54^\circ$   
 $180^\circ - 82^\circ = 98^\circ$   
 $180^\circ - 54^\circ - 98^\circ = 28^\circ$   
 b)  $\angle AFE = 360^\circ - 54^\circ - 98^\circ - 82^\circ$   
 $= 126^\circ$

13) 8/9

15) Daniel: 72, Jeremy: 18

17)  $\$340 + \$560 = \$990$   
 $75\% \rightarrow 340 + 650 = 990$   
 $15\% \rightarrow 990 \div 75 \times 15 = \$198$

10)  $21 - 8 = 13$   
 $13u \rightarrow \$1235$   
 $1u \rightarrow \$95$   
 $12 + 21 = 33$   
 $33u = \$95 \times 33 = \$3135$

12)  $15\text{cm} \times 10\text{cm} \times 8\text{cm} = 1200\text{cm}^3$   
 $20\text{cm} \times 15\text{cm} \times 13\text{cm} = 3900\text{cm}^3$   
 $3900\text{cm}^3 - 1200\text{cm}^3 = 2700\text{cm}^3$

14)  $Y = 1u$      $Z = 5u$   
 $6u = 126$   
 $1p = 18$   
 $4u = 84$   
 $1u = 21$   
 $7p = 126$   
 $15p = 15 \times 18 = 270 \text{ stamps}$

16) a)  $2u \rightarrow 48$   
 $1u \rightarrow 24$   
 $A \rightarrow 5 \times 24 = 120$   
 b)  $5u - 2u = 3u$   
 $A \rightarrow \text{sold } 3u$   
 $3 \times 24 = 72$   
 $72 \times 0.35 = \$25.23$

18) a) 72  
 b) Fig 90, shaded = 91  
 unshaded =  $90 \times 91 = 8190$   
 total =  $91 + 8190 = 8281$   
 c)  $600 = 24 \times 25$   
 Fig = 24