CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)

Primary 5

2014 Semestral Assessment Two

Mathematics

Paper 1

Booklet A

28 October 2014

Total Time for Booklets A and B : 50 min

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.
The use of calculators is NOT allowed.

This booklet consists of 7 printed pages including the cover page.

Questions **1** to **10** carry 1 mark each. Questions **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 the correct oval (1, 2, 3, or 4) on the Optical Answer Sheet.

(20 marks)

---

1. Dora bought a flat. It cost $740 000 when rounded off to the nearest $10 000. Which one of the following could be the price she paid for the flat?

   1) 734 599

   2) 739 405

   3) 745 000

   4) 745 199

2. Louis and Nikki are 9 and 15 years old respectively. In 3 years' time, what will be the ratio of Louis' age to Nikki's age?

   1) 1 : 2

   2) 2 : 3

   3) 3 : 2

   4) 3 : 5

3. Express 0.46 as a percentage.

   1) 0.046 %

   2) 0.46 %

   3) 4.6 %

   4) 46 %

4. A packet of nuts is repacked into 3 bags. The mass of the first bag is 5.6 kg. The total mass of the second and third bag is 7 kg. Find the average mass of the 3 bags.

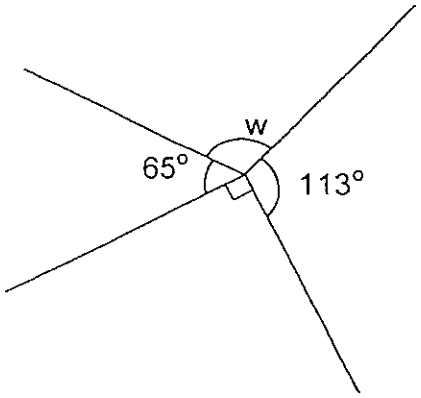
1) 4.2 kg

2) 9.1 kg

3) 12.6 kg

4) 19.6 kg

5. The figure below is not drawn to scale. What is $\angle w$?



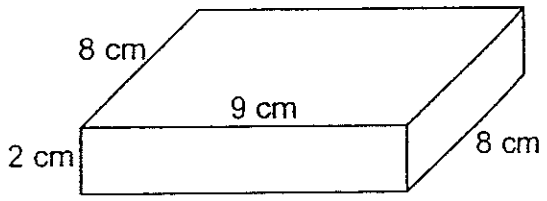
1) 67°

2) 90°

3) 92°

4) 113°

6. Find the volume of the box.



1) 32 cm^3

2) 144 cm^3

3) 162 cm^3

4) 576 cm^3

7. The average amount of water used by Nana and her three sisters is 84 ℓ per week. What is the total amount of water used per week?

1) 21 ℓ

2) 24 ℓ

3) 252 ℓ

4) 336 ℓ

8. Find the value of 12 ÷ 7. Express your answer as a decimal correct to 2 decimal places.

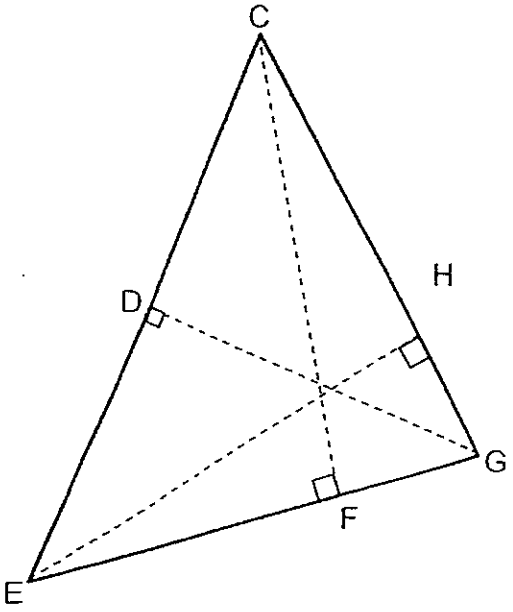
1) 0.58

2) 0.59

3) 1.71

4) 1.72

9. Triangle CEG is not drawn to scale. If CG is the base of Triangle CEG, find its height.



1) CE

2) DG

3) EH

4) CF

10. What must be added to 28 thousands to make a million?

1) 72 000

2) 720 000

3) 972 000

4) 1280 000

11. How many times in total, does the digit 1 appear between 100 and 120?

1) 19

2) 21

3) 30

4) 31

12. Kanping earned $1200 last month working as a part-time waitress. She saved 20% of her salary and spent 67% of it on food and transportation. The rest of her salary was spent on DVDs. How much did Kanping spend on DVDs?

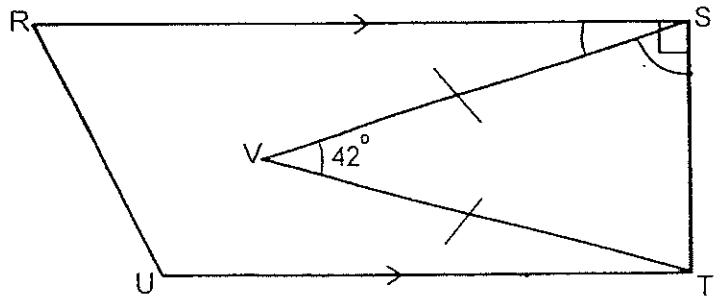
1) $156

2) $216

3) $336

4) $436

13. The figure, not drawn to scale, shows a trapezium RSTU. Find $\angle$ RSV.



1) 21°

2) 42°

3) 69°

4) 90°

14. Which one of the following has the greatest value?

1) $\frac{3}{5} \times \frac{2}{3}$

2) $\frac{5}{3} \times \frac{1}{2}$

3) $\frac{3}{4} \times \frac{2}{3}$

4) $\frac{4}{3} \times \frac{1}{2}$

15. Leticia collected 20 more pebbles than Lucy. When Lucy gave away 4 of her pebbles, she was left with $\frac{1}{3}$ of what Leticia had. How many pebbles did Lucy have at first?

1) 8

2) 12

3) 14

4) 16

** END OF BOOKLET A**

Name :

Class :

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)

Primary 5

2014 Semestral Assessment Two

Mathematics

Paper 1

Booklet B

28 October 2014

Booklet A	20
Booklet B	20
Total (Paper 1)	40

Total Time for Booklets A and B : 50 min

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.
The use of calculators is **NOT** allowed.

This booklet consists of 8 printed pages including the cover page.

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)

Do not write in this space

16. Find the value of 380 + 180 ÷ 3 x (27 - 24).

Ans : _____

17. Express 170.01 ℓ in ℓ and $m\ell$.

Ans : _____ ℓ _____ $m\ell$

18. What is the missing number in the box?

$$2 - 1\frac{4}{10} = \frac{\square}{5}$$

Ans : _____

19. Moy and Yusof collected a total of 121 ice-cream sticks in the ratio 2 : 9. Yusof collected three times as many ice cream sticks as Izam. How many ice cream sticks did Izam collect?

Do not write in this space

Ans : _____

20. Find the value of $\frac{11}{4} \div \frac{3}{4}$.

Express your answer as a mixed number.

Ans : _____

21. The usual price of a dining table was $600. Jonas bought the table at a discount of 15%. How much did he pay for the dining table?

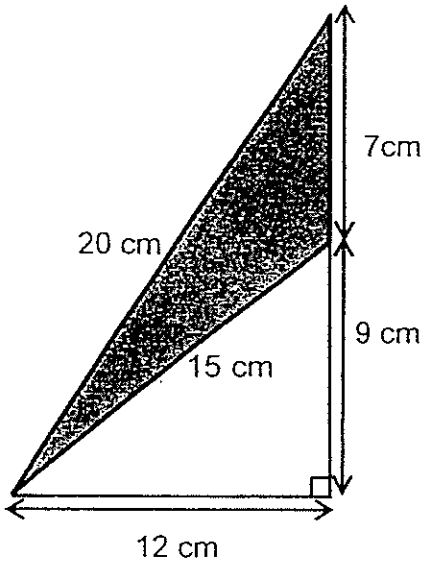
Ans : $_____

22. Lois bought 30 protractors at $1.05 each for her pupils. She received a change of $68.50 from the cashier after paying for the protractors. How much did she pay the cashier?

Do not write in this space

Ans : $_____

23. The figure below is not drawn to scale. Find the area of the shaded triangle.



Ans : _____ cm^2

24. Muthu made some toy animals using clay. $\frac{3}{8}$ of them were dogs and $\frac{3}{5}$ of the remainder were pandas. The rest were bears. What fraction of the toy animals were bears? Express your answer in the simplest form.

Do not write in this space

Ans : _____

25. 12 out of the 40 mangoes in a crate are rotten. The rest are not rotten. What percentage of the mangoes are not rotten?

Ans : _____ %

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)

Do not write in this space

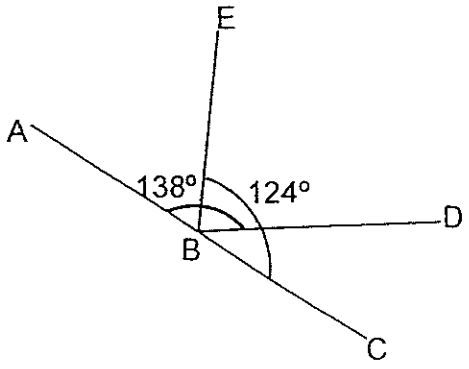
26. A total of 220 children queued up for a bumper ride. There were at least 5 boys between any 2 girls. What is the largest possible number of girls in the queue?

Ans : _____

27. The total height of 5 buildings is 745 m. One of the buildings is 69 m tall. What is the average height of the remaining buildings?

Ans : _____ m

28. The figure below is not drawn to scale. ABC is a straight line. $\angle ABD = 138^\circ$ and $\angle EBC = 124^\circ$. Find $\angle EBD$.



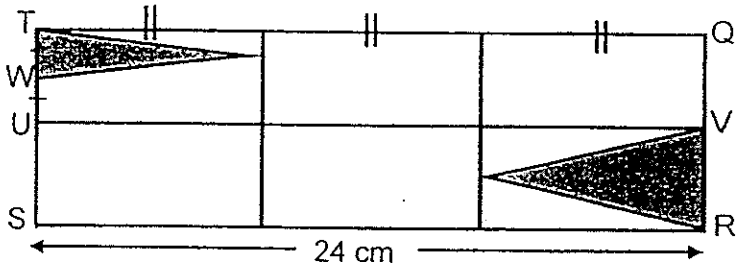
Ans : _____ °

29. Serena spent 5 days making teddy bears for her classmates. Each day, she made 2 more teddy bears than the day before. At the end of the 5 days, she made a total of 35 teddy bears. How many teddy bears did she make on the fifth day?

Ans : _____

Do not write in this space

30. The figure below, not drawn to scale, shows a rectangle QRST. The length of TQ is three times the length of QR. Both U and V are midpoints of TS and QR respectively. TW = WU. What is the area of the unshaded parts of the figure? ~~Express your answer in the simplest form.~~



Ans : _____ cm^2

Do not write in this space

END OF PAPER 1

Name

Class :

CHIJ ST NICHOLAS GIRLS' SCHOOL (PRIMARY)

Primary 5

2014 Semestral Assessment Two

Mathematics

Paper 2

28 October 2014

Paper 1	40
Paper 2	60
Total	100

Time : 1 hour 40 minutes

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so
Follow all instructions carefully.
Answer all questions.
The use of an approved calculator is expected, where appropriate.

This booklet consists of 15 printed pages including the cover page.

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)

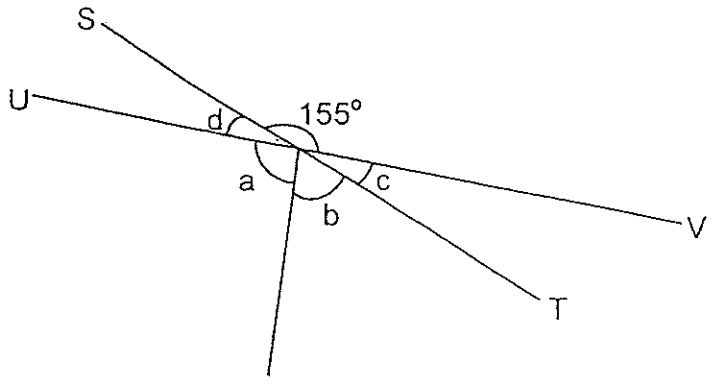
Do not write in this space

1. A number contains 6 digits.
The digit in the tens place is the greatest 1-digit number.
The digit in the thousands place is half of the digit in the hundreds place.
There are 2 zeros in the number.
One of the zeros is next to the digit 6 which has a value of 600 000.

Write down any 2 possible numbers.

Ans : _____, _____

2. The figure below is not drawn to scale. ST and UV are straight lines. The ratio of ∠a to ∠b is 3 : 2 . Find the difference between ∠a and ∠c.



Ans : _____ °

Do not write in this space

3. The 2 figures below are made up of 2-cm cubes.

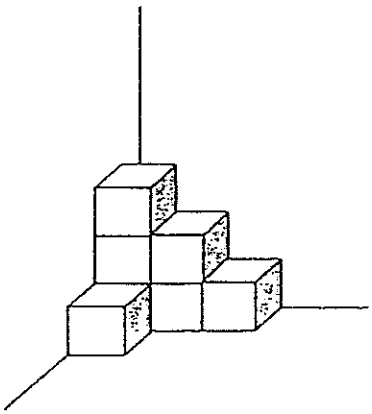


Figure S 7

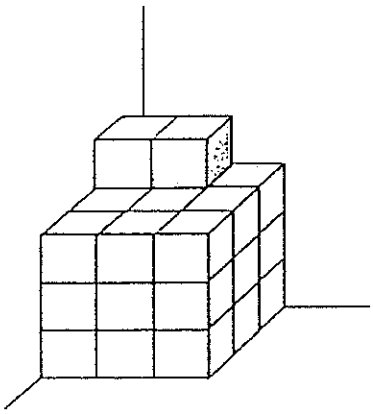


Figure T 29

Find the difference between the volumes of Figure S and Figure T.

Ans : _____ cm^3

4. The price of the ribbon sold in a handicraft shop is shown in the table below.

First 2 metres	80 ¢ per metre
Every additional $\frac{1}{2}$ metre	35 ¢

Setia bought 5.5 m of ribbon from the shop. How much did she pay?

Ans . $_____

5. Marvin and Lydia have \$2613 altogether. Lydia has $\frac{5}{8}$ of what Marvin has. How much money does Marvin have?

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)

Do not write in this space

6. A group of boys shared some game cards among themselves. They tried to share by taking 16 cards each. However, the last boy had only 12 cards. If the boys decided to take 14 cards each, there would be 6 cards leftover. How many cards were there altogether?

Ans : _____ [3m]

7. 45% of the pupils in Happy Smile Kindergarten are boys. 40% of the boys and $\frac{1}{5}$ of the girls are taking part in the year end concert. What percentage of the children in the kindergarten are taking part in the year end concert?

Ans : _____ [3m]

Do not write in this space

8. The table below shows the number of bicycles Cool Bike Shop sold over a period of 5 months in 2013.

Month	May	June	July	August	September
Number of bicycles sold	250	?	400	275	675

(a) The ratio of the number of bicycles sold in May to the number of bicycles sold in May and June is 5 : 17. How many bicycles were sold in June?

(b) From October to December in the same year, the shop sold 26% of what was sold in June. Find the average number of bicycles sold from October to December.

Ans : (a) _____ [1m]

(b) _____ [2m]

Do not write in this space

9. A rectangular container has a square base of side 7 cm. The length of the container is $\frac{1}{3}$ of its height. Find the volume of the container.

Ans : _____ [3m]

10. Loha bought $3\frac{1}{5}$ kg of flour to bake a lemon cake and some cookies for a party. She used $\frac{1}{4}$ of the flour to bake the lemon cake and $\frac{3}{5}$ of the remaining flour to bake the cookies. How much flour did she have left?

Ans : _____ [3m]

11. During the Great Singapore Sale, ACE Electric City offered the following promotion:

Do not write in this space

> Buy any **2** items, LESS 15%
> AND
> Buy the 3rd item at LESS 50%.
> **(This item has to be of the lowest value amongst the three items bought.)**

Ginnie bought a washing machine, a microwave oven and a television set. The selling prices of the three items are given in the table below.

SALE ! BUY NOW !!		
Washing machine	$1099	$899
Microwave oven	$899	$799
Television set	$1299	$990

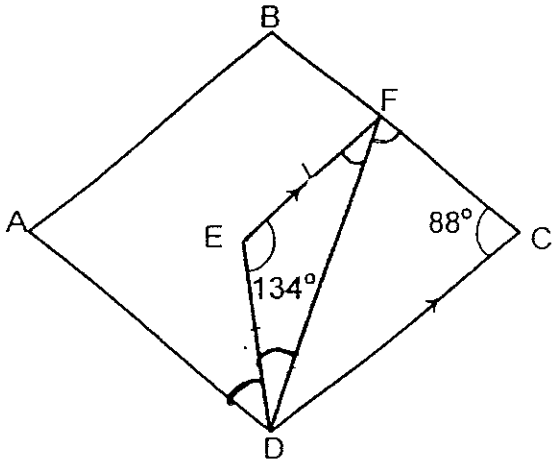
How much did she spend in all?

Ans : _____ [4m]

12 The figure below is not drawn to scale. ABCD is a rhombus. DE = EF and EF is parallel to DC. Find

(a) $\angle EDF$

(b) $\angle ADE$



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Ans : (a) _____ [2m]

(b) _____ [2m]

13. Kimura had some badges. He gave $\frac{1}{6}$ of them to Ming Teck and $\frac{3}{11}$ of the remaining badges to Harold. Then his mother bought him another 182 badges. In the end, he had as many badges as he had at first. How many badges did he have at first?

Do not write in this space

Ans : _____ [4m]

14. A total of 1936 children and adults attended a carnival. There were 318 girls and 498 women. The number of children to the number of adults is in the ratio 3 : 5.

Do not write in this space

a) How many men were there at the carnival?

b) What percentage of the people at the carnival were males? Leave your answer correct to the nearest per cent.

Ans : a) _____ [2m]

b) _____ [3m]

15. Linden had 29 more fifty-cent coins than ten-cent coins. After he had used 37 fifty-cent coins, the value of the fifty-cent coins was $3.20 more than the value of the ten-cent coins. How many fifty-cent coins and ten-cent coins did he have at first?

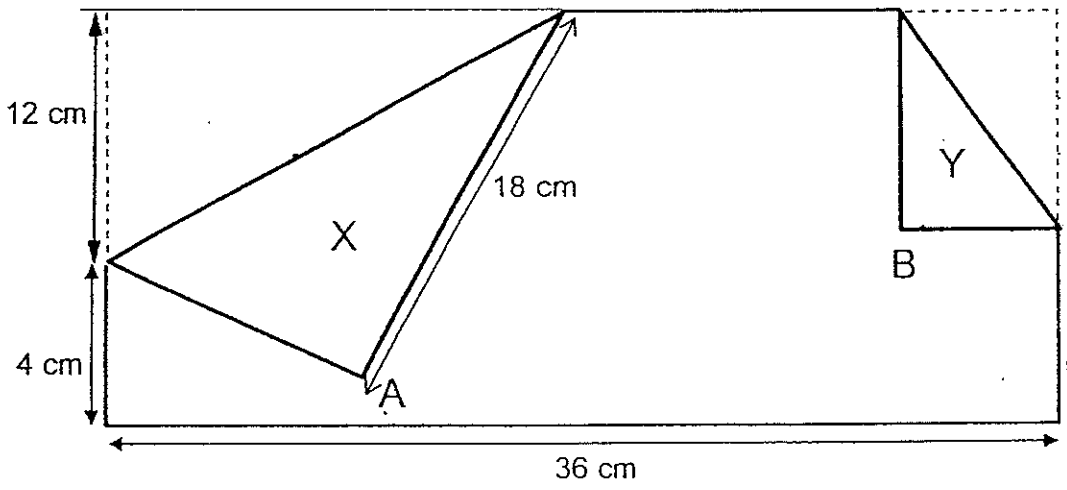
Do not write in this space

Ans : Fifty-cent coins → _____

Ten-cent coins → _____ [4m]

16. The figure below shows a rectangular piece of paper with two folded corners, A and B. The area of Y is $\frac{1}{4}$ the area of X. What is the ratio of the area of X to the area of Y to the area of the rectangular piece of paper before it is folded?

Do not write in this space



Ans : _____ [4m]

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17. Luna wanted to buy a computer. The computer cost $3850. The shop offered two modes of payment, as shown in the table below.

Mode of Payment	
Payment A - By cash	Payment B - By instalment
Pay cash in full and receive 12 % discount	Pay $331 monthly for a year, and 7.5 % on original price of the computer as down payment

(a) If Luna opted for Payment A, what was the discounted price of the computer?

(b) Which plan, Payment A or Payment B, will help Luna to save more money ? How much money would she save ?

Ans : a) _____ [1m]

b) Payment _____ [1m]

_____ [3m]

18. A courier service company charged \$12 for the delivery of big parcels and \$7 for small parcels. In September, the courier service company received \$12 495.

The number of big parcels delivered was $\frac{7}{9}$ of the number of small parcels delivered.

(a) How many small parcels did the company deliver?

(b) Find the difference in the amount of money received from the delivery of big parcels and small parcels.

Do not write in this space

Ans : a) _____ . [3m]

b) _____ . [2m]

** END OF PAPER **

Exam Paper 2014 Answer Sheet

School: CHIJ ST NICHOLAS GIRLS' SCHOOL
Subject: PRIMARY 5 MATHEMATICS
Term: SA2

Paper 1

1)	2	6)	2	11)	4
2)	2	7)	4	12)	1
3)	4	8)	3	13)	1
4)	1	9)	3	14)	2
5)	3	10)	3	15)	4

16. 560

17. 170litres 10ml

18. $^{3}/_{5}$

19. 33

20. $3^{2}/_{3}$

21. 510

22. 100

23. 42

24. $^{1}/_{4}$

25. 70

26. 1grp → 5B + 1G = 6 children
No. of grp → 220 ÷ 6 = 36r4
No. of girls → 36 + 1 = **37**

27. Total remaining heights → 745 – 69 = 676
Average → 676 ÷ 4 = **169**

28. 138 + 124 = 262
262 – 180 = **82**

29. 5u → 35 – (2 x 10) = 15
1u → 3
5th day → 3 + 2 + 2 + 2 + 2 = **11**

30. TQ → 24
QR → 24 ÷ 3 = 8
VR → 8 ÷ 2 = 4
TW → 4 ÷ 2 = 2
Area of A → $^{1}/_{2}$ x 2 x 8 = 8
Area of B → $^{1}/_{2}$ x 4 x 8 = 16
Total area → 24 x 8 = 192

Unshaded → 192 – 8 – 16 = **168**

Paper 2

1. **603690, 602490**

2. 5u → 155
   Angle a → (3 x 155) ÷ 5 = 93
   Angle c → 180 – 155 = 25
   93 – 25 = **68**

3. 1 cube → 2 x 2 x 2 = 8
   Diff → 29 – 7 = 22
   22 cubes → 8 x 22 = **176**

4. 2m → 0.80 x 2 = 1.60
   Remaining → 5.5 – 2 = 3.5
   3.5 ÷ 0.5 = 7
   7 x 0.35 = 2.45
   Total paid → 2.45 + 1.60 = **4.05**

5. 13u → 2613
   Marvin → (8 x 2613) ÷ 13 = **1608**

6. 16c + 12 = 14c + 14 x 1 + 6
   16c + 12 = 14c + 20
   16c – 14c = 8
   1c = 4
   No. of cards → (16 x 4) + 12 = **76**

7. Taking part → (18 + 11) ÷ 100 = **29%**

8. (a) June → 17u – 5u = 12u
   5u → 250
   12u → **600 bicycles**
   (b) Oct to Dec → (26 ÷100) x 600 = 156
   Oct to Dec → 3 months
   Average → 156 ÷ 3 = **52 bicycles**

9. Length → 7cm
   Height → 7 x 3 = 21cm
   Volume → 7 x 7 x 21 = **1029cm^3**

10. $1 - {}^{1}/_{4} = {}^{3}/_{4}$
    Flour after LC → ${}^{3}/_{4} \times 3{}^{1}/_{5} = 2{}^{2}/_{5}$kg
    $1 - {}^{3}/_{5} = {}^{2}/_{5}$
    Flour left → ${}^{2}/_{5} \times 2{}^{2}/_{5} = {}^{24}/_{25}$**kg**

11. Total of WM and TV → 899 + 990 = $1889
    After disc. → ${}^{85}/_{100} \times 1889$ = $1605.65
    MO → ${}^{50}/_{100} \times 799$ = $399.50
    Total → 1605.65 + 399.50 = **$2005.15**

12. (a) Angle EDF → (180 – 134) ÷ 2 = **23°**
    (b) Angle EFC → 180 – 88 = 92
        Angle FDA → 92 – 23 = 69
        Angle ADE → 69 – 23 = **46°**

13. $^{5}/_{6} = {}^{55}/_{66}$
    $^{3}/_{11} = {}^{15}/_{55}$
    Ming Teck → $^{11}/_{66}$ badges
    Harold → $^{15}/_{55}$ of remaining badges
    Gave away → 11u + 15u = 26u
    26u → 182
    66u → **462**

14. C : A : Total
    3 : 5 : 8
    (a) Adults → (5 x 1936) ÷ 8 = 1210
        Men → 1210 – 498 = **712**
    (b) Children → (3 x 1936) ÷ 8 = 726
        Boys → 726 – 318 = 408
        Males → 408 + 712 = 1120
        (1120 ÷ 1936) x 100% = **58%**

15. Try an error method
    18 x $0.10 = $1.80
    47 x $0.50 = $23.50

16. Area of X → $^{1}/_{2}$ x 12 x 18 = 108
    Area of Y → 108 ÷ 4 = 27
    Area of paper → 36 x (12 + 4) = 576
    X : Y : Area of paper
    108 : 27 : 576
    12 : 3 : 64

17. (a) 100% - 12% = 88%
        $^{88}/_{100}$ x 3850 = **$3388**
    (b) Payment B: DP → $^{7.5}/_{100}$ x 3850 = 288.75
        12mths → 331 x 12 = 3972
        Payment B → 3972 + 288.75 = $4260.75
        Save → $4260.75 - $3388 = **$872.75**
        Payment A

18. (a) 1grp (7B + 9S) → (7 x $12) + (9 x $7) = $147
        No. of grp → 12495 ÷ 147 = 85
        No. of small parcels → 85 x 9 = **765**
    (b) No. of big parcels → 85 x 7 = 595
        Amt for big parcels → 12 x 595 = 7140
        Amt of small parcels→ 7 x 765 = 5355
        Diff → $7140 - $5355 = **$1785**