METHODIST GIRLS' SCHOOL
Founded in 1887

END-OF-YEAR EXAMINATION 2011
PRIMARY 5 MATHEMATICS

PAPER 1
(BOOKLET A)

Total Time for Booklets A and B: 50 minutes

INSTRUCTIONS TO CANDIDATES

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.

Name: _____ (   )

Class: Primary 5._____

Date :   11 October 2011

This booklet consists of 6 printed pages including this page.

63

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   What is the value of 24 + 72 ÷ 12 x 2?

    (1)   60
    (2)   36
    (3)   16
    (4)   4

2   The population of Blackmore City when rounded off to the nearest million is 1 million.   Which of the following is the **best** estimate of the population size?

    (1)   955 000
    (2)   990 000
   (3)   1 005 000
    (4)   1 550 000

3   A basket weighs 0.6 kg. The mass of the basket and 4 papayas is 3.6 kg. Find the average mass of one papaya.

    (1)   0.75 kg
    (2)   0.84 kg
    (3)   0.90 kg
    (4)   1.05 kg

4   A total of 36 men, 60 women and 24 children attended a piano recital. What fraction of the audience were children?
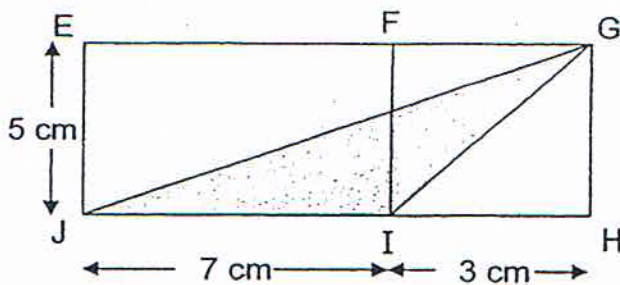
    (1) $\dfrac{1}{5}$

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

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

    (4) $\dfrac{4}{5}$

5   A and B are mid-points of the sides of the rectangle.
     What fraction of the rectangle is shaded?
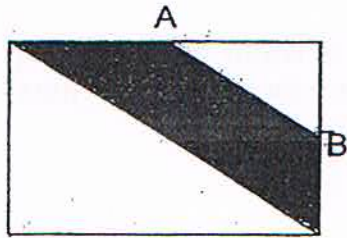
(1) $\frac{1}{4}$

(2) $\frac{3}{8}$

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

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

6   What is the area of the unshaded parts?

(1)   25 cm^2
(2)   45 cm^2
(3)   32.5 cm^2
(4)   52.5 cm^2

7    $3.06 \times 30 = 2.06 \times 30 + A \times 30$.
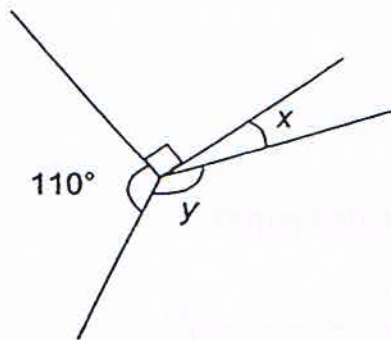   What is the value of A?

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

65

8 Fatimah uses 250 mℓ of syrup and 1.5 ℓ of water to make a jug of cranberry juice. How many litres of cranberry juice are there in 3 such jugs?
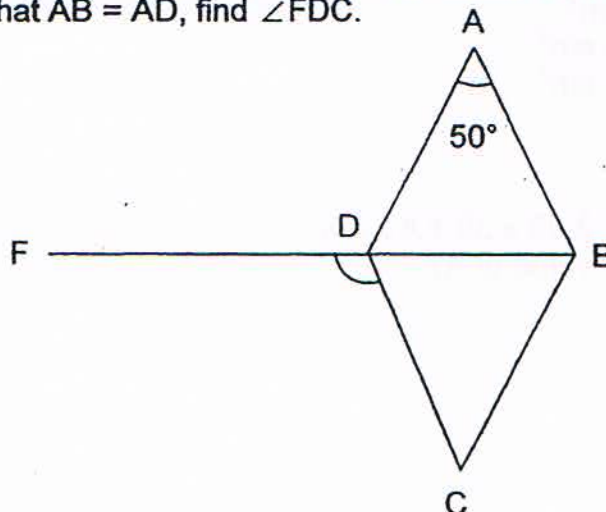
(1) 1.75 ℓ
(2) 2.90 ℓ
(3) 4.75 ℓ
(4) 5.25 ℓ

9 In the figure, not drawn to scale, $\angle y$ is 96° larger than $\angle x$.
Find $\angle x$.

(1) 32°
(2) 36°
(3) 40°
(4) 64°

10 The figure below is not drawn to scale. ABCD is a rhombus and FB is a straight line. Given that AB = AD, find $\angle FDC$.
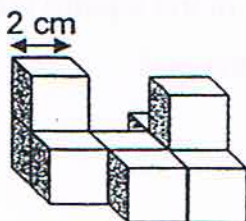

(1) 65°
(2) 100°
(3) 115°
(4) 130°

11 The average mass of a group of boys was 48 kg. When John joined the group, the new average mass of the group became 54 kg. If John weighed 72 kg, how many boys were there in the group in the end?

    (1) 9
    (2) 8
    (3) 6
    (4) 4

12 The figure shows a solid that is made up of cubes of side 2 cm. How many **more** cubes are needed to form a cuboid of sides 6 cm by 8 cm by 6 cm?

2 cm

    (1) 18
    (2) 19
    (3) 27
    (4) 28

13 May spent $\frac{1}{6}$ of her money on a storybook and $18 on a wallet. She had $\frac{1}{3}$ of her money left. How much money did she have left?

    (1) $6
    (2) $12
    (3) $24
    (4) $36

14   The perimeter of rectangle is 60 cm. Its breadth is 14 cm. Find the ratio of its
~~length to its breadth,~~
length to its breadth

(1)   7 : 8
(2)   7 : 9
(3)   8 : 7
(4)   23 : 14

15   60% of the buttons in a jar were round and the rest were square. Mrs Tan

used 20% of the round buttons and $\frac{1}{4}$ of the square buttons. What

percentage of the buttons were left in the jar?

(1)   22%
(2)   55%
(3)   70%
(4)   78%

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END-OF-YEAR EXAMINATION 2011
PRIMARY 5 MATHEMATICS

PAPER 1
(BOOKLET B)

Total Time for Booklets A and B: 50 minutes

INSTRUCTIONS TO CANDIDATES

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 calculators is **NOT** allowed.

Name: _____ (   )

Class: Primary 5._____

Date: 11 October 2011

Paper 1 Booklet A	/ 20
Paper 1 Booklet B	/ 20
Paper 2	/ 60
TOTAL	/ 100

This booklet consists of 7 printed pages including this page.

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Questions **16** to **25** carry 1 mark each. Questions **26** to **30** carry 2 marks each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(20 marks)

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16 Find the value of 5 074 – 336. Round off your answer to the nearest ten.

Ans: _____

17 The digit in the thousands and ones place is 4. The sum of all the digits is 10. What is the smallest 4-digit whole number?

Ans:_____

18 Arrange these fractions in decreasing order:

$$\frac{3}{10}, \frac{2}{7}, \frac{1}{3}$$

Ans: _____

19 A piece of ribbon is $\frac{3}{4}$m long.. What is the total length of 7 such ribbons?

Ans: _____m

20 What is the missing number in the box?

$$\frac{13}{9} = 3 - \frac{\boxed{}}{9}$$

Ans: _____

21 Sean had $3\frac{5}{12}$ litres of milk. He used $2\frac{1}{6}$ litres of the milk to make some muffins and the rest to bake 2 sponge cakes. How much milk did he use to bake each sponge cake? Express your answer in the simplest form.

Ans: _____ ℓ

22 The table below shows the marks scored by Jerry in 4 class tests. The average score is 63. What was Jerry's test score for Science?
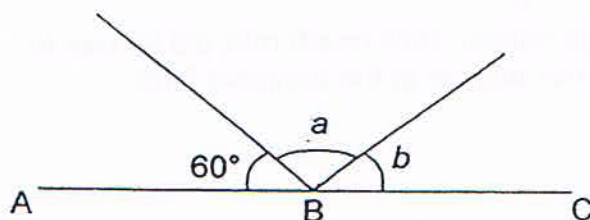
Subject	Marks
English	60
Mother Tongue	69
Mathematics	58
Science	?

Ans: _____

23   Mrs Lim deposited $4 200 in her bank account. The bank paid her an interest of 3% per year, how much would she have in the bank at the end of the year?
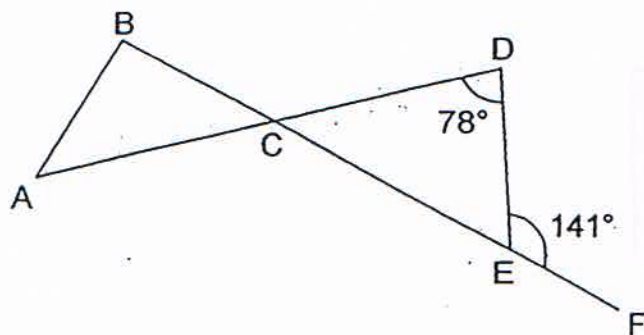
Ans: $_____

24   In the figure below, ABC is a straight line.
Given that ∠a is twice as big as ∠b, find ∠a.

Ans:_____°

25   The figure below is not drawn to scale. AD and BF are straight lines.
∠CDE is 78° and ∠DEF is 141°. Find ∠ACB.

Ans: _____°
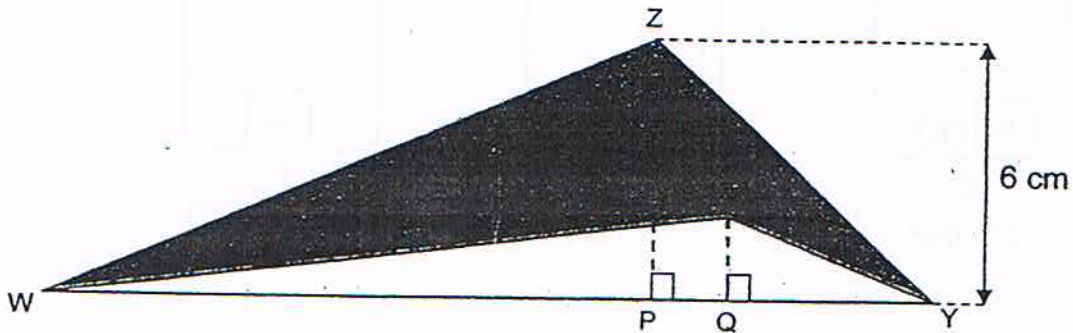
(Go on to the next page)

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 Jean and Samantha shared some money in the ratio 7 : 4. Jean received $240 more than Samantha, how much money did they have altogether?

Ans: $ _____

27 The area of the shaded figure WXYZ is 34 cm². ZP is 6 cm and ZP is 3 times the size of XQ. What is the length of WY?
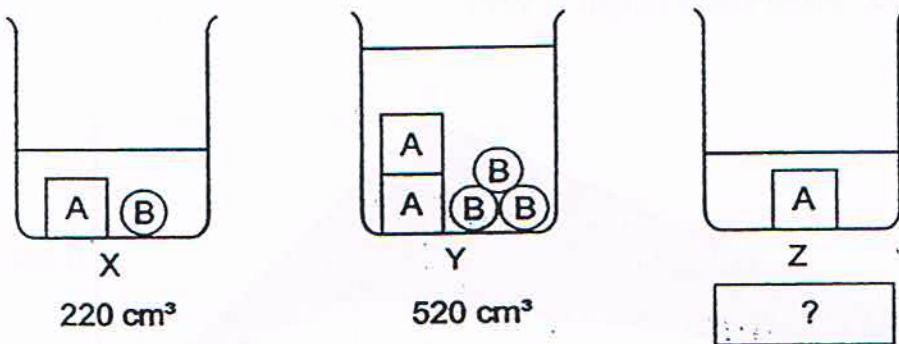

Ans: _____ cm

(Go on to the next page)

73

28 Mrs Tay bought some chicken with 30% of her money. She bought some vegetables with $\frac{1}{2}$ of the remaining money and had $7 left. How much money did Mrs Tay have at first?

Ans: $_____

29 The 3 containers below contain the same amount of water. The volume of the water and objects in containers X and Y are as indicated on the diagram below. What is the volume of the water and object A in container Z?

X	Y	Z
220 cm³	520 cm³	?

Ans:_____ cm³

30 Draw a triangle PQR in which QR = /8 cm, ∠PQR = 55° and ∠PRQ = 40°.
Label your diagram clearly.

Q

End of Booklet B

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END-OF-YEAR EXAMINATION 2011
PRIMARY 5 MATHEMATICS
PAPER 2

Total Time: 1 h 40 min

<u>INSTRUCTIONS TO CANDIDATES</u>

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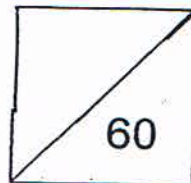Follow all instructions carefully.
Answer all questions.
Write your answers in this booklet.
The use of an approved calculator is expected, where appropriate.

Name: _____ (   )

Class: Primary 5._____

Date: 11 October 2011

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This booklet consists of 13 printed pages including this 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)

1 Mary saves $\frac{3}{7}$ as much as Sammie. If Sammie saves $140 more than Mary, how much do they save altogether?

Ans: $ _____

2 Junita takes 25 minutes to make a gift card. She spent 3 hr 20 min to make all her gift cards. How many gift cards did she make altogether?

Ans: _____

3 The usual price of a bag is $220. During the Great Singapore Sale, Mrs Ang bought the bag at a 30% discount.
She had to pay 7% GST on the discounted price.
(a) How much GST did she pay?
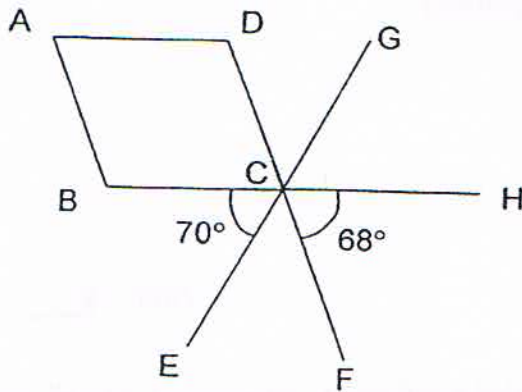(b) How much did she pay for the bag, inclusive of GST?
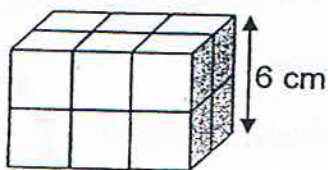
30% discount
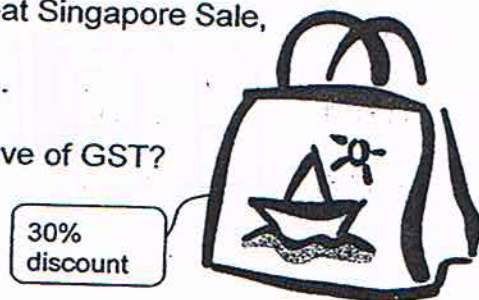
Ans: (a) $ _____

(b) $ _____

(Go on to the next page)

4   The figure below is not drawn to scale. ABCD is a rhombus, BH, EG and DF are straight lines, ∠BCE is 70° and ∠FCH is 68°, find ∠ABC.

Ans: _____ °

5   The figure below is made up of cubes which are of the same size. What is the volume of the figure?

6 cm

Ans:_____ cm³

For questions **6** to **18**, show your working clearly and write your answers in the space provided. The number of marks available is shown in brackets [ ] at the end of each question or part-question.

(50 marks)

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6   Mr Wong sold 5 kg of rambutans and 4 kg of longans for $40. Mrs Tan bought 4 kg of rambutans and 5 kg of longans. She paid for the fruits with ~~a ten dollar~~ notes and received $1.25 change. What was the price of ~~1 kg of longans?~~ 1 kg of longans?

Ans: _____ [3]

7   Harry used $\frac{3}{5}$ of his money to buy a book which cost $15. He spent the rest of his money on transport and food. He spent $4 more on food than on transport.

How much did he spend on food?

Ans: _____ [3]

(Go on to the next page)

8   In the figure below not drawn to scale, AB = BE and AB = BC.
     Given that ∠DAB is 28° and ∠ADE is 92°, find ∠EAD.
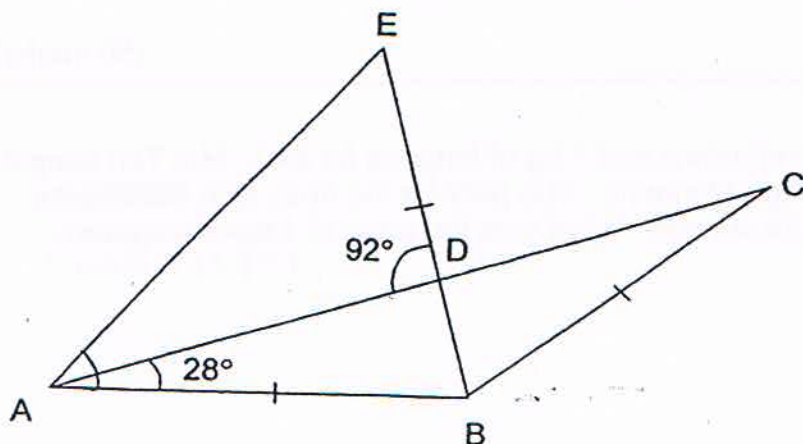
Ans: _____ [3]

9   There are $\frac{3}{5}$ as many 50-cent coins as 10-cent coins. The ratio of the number
     of 50-cent coins to the number of one-dollar coins is 4 : 7.
     What is the ratio of the number of 10-cent coins to the number of one-dollar
     coins?

Ans: _____ [3]

(Go on to the next page)

10   Ann measures the length of her classroom with her footsteps and finds that the classroom is 6.15 m long. Ann's foot is 20.5 cm long, how many footsteps did she take?

20.5 cm

Ans: _____ [3]

11   The average height of 3 boys is 1.24 m. One more boy whose height is 1.16 m joins the group, what is the average height of the 4 boys?

Ans:_____ [3]

(Go on to the next page)
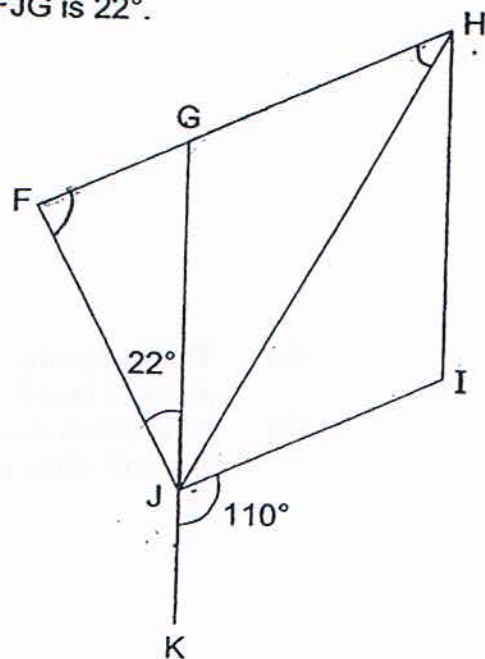
12 In the figure below, BC is a straight line.
    (a) Draw a trapezium ABCD in which AD // to BC, ∠ABC = 75°,
         ∠BCD = 50° and CD = 5 cm.   [3]
    (b) What is the length of AD?

B _____ C

Ans: (b)_____ [1]

13   The figure below is not drawn to scale.
      FHIJ is a trapezium and GHIJ is a rhombus.
      GK is a straight line, $\angle$IJK is 110° and $\angle$FJG is 22°.
      (a)   Find $\angle$HFJ
      (b)   Find $\angle$GHJ
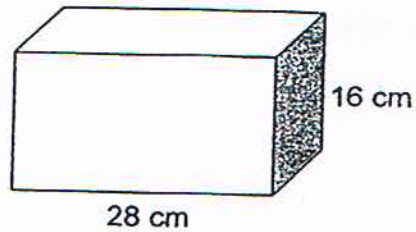

Ans: (a)_____[2]

      (b)_____[2]

(Go on to the next page)

14 The figure below shows a rectangular container. It contained 1.76 litres of water.
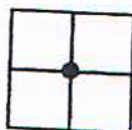

16 cm

28 cm

(a) The perimeter of the shaded face is 58 cm. What is the area of the shaded face?

(b) How much more water must be poured in so that the water level reaches 10 cm? Give your answer in litres.
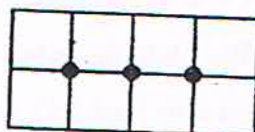
Ans: (a)_____[2]

(b)_____[2]

(Go on to the next page)

15   The figure below is formed using squares and dots.

Pattern 1   Pattern 2   Pattern 3

Pattern number	Number of squares	Number of dots
1	4	1
2	6	2
3	8	3
:	:	:
5	?	

(a)   How many squares are there in Pattern 5?
(b)   How many dots will you find in a pattern which has 40 squares?
(c)   What is the total number of squares and dots in Pattern 15?

Ans: (a)_____ [1]

(b)_____ [2]

(c)_____ [2]

16   Devi and Siti had some savings. Together, they donated a total sum of $50 to Happy Joy Charity. Devi donated $\frac{1}{4}$ of her savings. After making a donation of $13, Siti found that she had $17 more in her savings than Devi.

(a)   How much money did Devi have at first?

(b)   How much savings did both of them have left?

Ans: (a)_____ [2]

(b)_____ [3]

17 Megan, Nora and Olivia shared the cost of a rental flat. Megan paid $\frac{2}{5}$ of the total amount paid by Nora and Olivia. The ratio of the amount paid by Nora to the total amount paid by Megan and Olivia was 1 : 3.

(a) What is the ratio of the rent paid by Megan to the rent paid by Nora to the rent paid by Olivia?

(b) Given that Megan paid $35 more than Nora, how much rent did the 3 girls pay for the flat?

Ans: (a)_____ [2]

(b)_____ [3]

18 Watten School set aside a sum of money for their school musical. 40% of the
money was allocated to stage decorations, $\frac{1}{4}$ of the remaining sum was
allocated to costumes and the rest of the money to merchandise. One donor
decided to sponsor part of the cost of the musical and thus the money allocated
for the musical increased by 30%.
The initial sum allocated for costumes is $2 850.

(a) What was the amount of money allocated for the school musical at first?
(b) How much money did the school receive from the donor?
(c) How much money was allocated to merchandise in the end?

Ans: (a)_____[2]

(b)_____[1]

(c)_____[2]

End of Paper

EXAM PAPER 2011

SCHOOL : MGS
SUBJECT : PRIMARY 5 MATHEMAEICS

TERM   : SA2
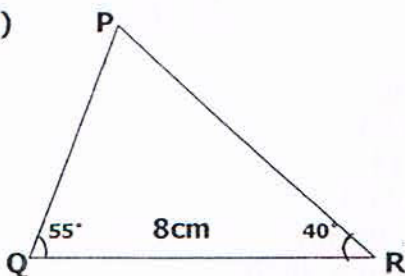
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
2	3	1	1	2	3	1	4	1	3	4	3	2	3	4

16)4740   17)4024   18)1/3, 3/10, 2/7   19)5¼m   20)14

21)5/8   22)65   23)$4326   24)80°   25)63°

26)$880   27)17cm   28)$20   29)140cm3

30)

Paper 2

1)4u→140
  1u→140÷4 = 35
  10u→35 x 10 = 350
  They save $350 altogether.

2)3hr→180min
  180 + 20 = 200
  3hr 20min→200min
  200÷25 = 8
  She made 8

3)a)100 − 30 = 70
  220 x 70% = 154
  154 x 7% = 10.78
The GST she has to pay is $10.78
  b)154 + 10.78 = 164.78
She paid $164.78

4)(180 − 68) ÷2 = 56(∠DBC)
  56 x 2 = 112 (∠ABC)
  ∠ABC is 112°

5)6÷ 2 = 3
  3 x 3 = 9
  9 x 6 x 6 = 324
  The volume is 324cm3

6)1.25 x 4 = 5
  38.75 − 5 = 33.75
  33.75÷9 = 3.75
  1 kg of longans is $3.75

7) $15 \div 3 = 5$
  $1u \rightarrow 5$
  $5 \times 2 = 10$
  $10 - 4 = 6$
  $6 \div 2 = 3$
  $3 + 4 = 7$
  He spent $7

8) $180 - (28+28) = 124$ ($\angle ABC$)
  $180 - 92 = 88$ ($\angle ADB$)
  $180 - 88 = 92$ ($\angle BDC$)
  $180 - (92+28) = 60$ ($\angle DBC$)
  $124 - 60 = 64$ ($\angle ADB$)
  $180 - 64 = 116$
  $116 \div 2 = 58$ ($\angle ABE$)
  $58 - 28 = 30$ ($\angle EAD$)
  $\angle EAD$ is $30°$

9) 20:21

10) $6.15 \times 100 = 615$
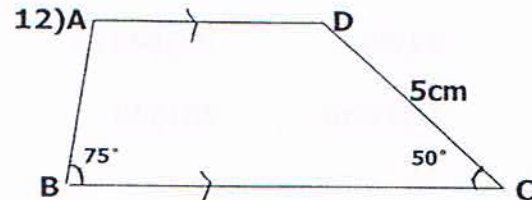 $615 \div 20.5 = 30$
  She took 30 steps

11) $1.24 \times 3 = 3.72$
  $3.72 + 1.16 = 4.88$
  $488 \div 4 = 1.22$
The average is 1.22m

12)

13) a) $180 - 110 = 70$
    $180 - 70 = 110$
    $180 - (70+72) = 88°$
    $\angle HFJ$ is $88°$
  b) $180 - 110 = 70$
    $70 \div 2 = 35°$
    $\angle GHJ$ is $35°$

14) a) $16 \times 2 = 32$
    $58 - 32 = 26$
    $26 \div 2 = 13$
    $16 \times 13 = 208$
    The area is $208cm^2$
  b) $28 \times 13 \times 10 = 3640$
    $3640 - 1760 = 1880$
    $1880 \div 1000 = 1.880L$
    1.880L more must be poured in.

15) $2 \times 6 = 12$
  a) There will be 12 squares
    $40 - 2 = 38$
    $38 \div 2 = 19$
  b) There will be 19 dots

pattern no.	no. of squares	no. of dots
15	32	15

    $16 \times 2 = 32$
    $32 + 15 = 47$
  C) The total number is 47

16) 50 − 13 = 37
     37 x 4 = 148
   a)Devi has $148 at first
     37 x 3 = 111
     111 + 17 = 128
     128 + 111 = 239
   b)Both of them have $239 left.

17)a)8: 7: 13
    b)8u − 7u = 1u
      1u→35
      8u + 7u + 13u = 28u
      28u→$980

18)1u of R→2850
    2850 x 4 = 11460
    6u→11400
    11400÷6 = 1900
    1u→1900
    1900 x 10 = 19000
    10u→19000
a)$19000 at first
    19000 x 30% = 5700
b)The school receive $5700
    5700 + 19000 = 24700
    1u→24700 ÷10 = 2470
    6u→2470 x 6 = 14820
    4u of R→14820÷4 = 3705
    3u of R→3705 x 3 = 11115
  c)$11115 in the end