# METHODIST GIRLS' SCHOOL

Founded in 1887

## PRIMARY 5 SEMESTRAL ASSESSMENT 2 2014
## 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: 28 October 2014

This booklet consists of 6 printed pages including this 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 oval (1, 2, 3 or 4) on the Optical Answer Sheet. (20 marks)

---

**1** Round off 388 599 to the nearest thousand.

(1) 388 000
(2) 389 000
(3) 390 000
(4) 400 000

**2** There are _____ thousands in half a million.

(1) 500
(2) 5 000
(3) 50 000
(4) 500 000

**3** In the number 624 231, the value of the digit 2 in the ten thousands place is _____ times the value of the digit 2 in the hundreds place.

(1) 10
(2) 100
(3) 1 000
(4) 10 000

**4** What is the value of $5\frac{3}{8} - 1\frac{2}{3}$?

(1) $3\frac{7}{12}$
(2) $3\frac{17}{24}$
(3) $4\frac{1}{5}$
(4) $4\frac{5}{24}$

5 The value of $\frac{4}{5} \div 8$ is equal to _____.

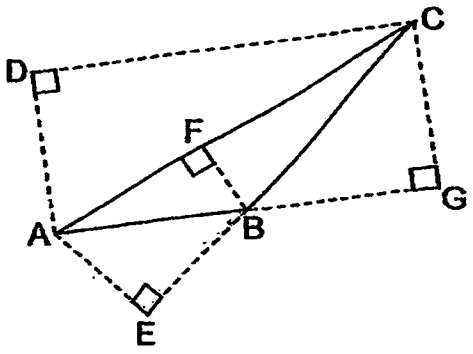
(1) $\frac{4}{5} \times 8$

(2) $8 \div \frac{4}{5}$

(3) $\frac{4}{5} \times \frac{1}{8}$

(4) $\frac{5}{4} \times 8$

6 BC is the base of triangle ABC. What is its height?




(1) CD
(2) AE
(3) BF
(4) CG

7 What is 0.35 x 300?

(1) 0.105
(2) 1.05
(3) 10.5
(4) 105

8 Which of the following is the same as 9 090 ml?

(1) 9 ℓ 9 mℓ
(2) 9 ℓ 90 mℓ
(3) 90 ℓ 9 mℓ
(4) 90 ℓ 90 mℓ



(Go on to the next page)

9 Which of the following statements about Figure A and Figure B are true?

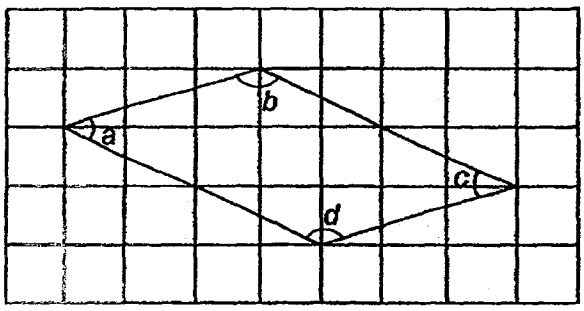



Figure A

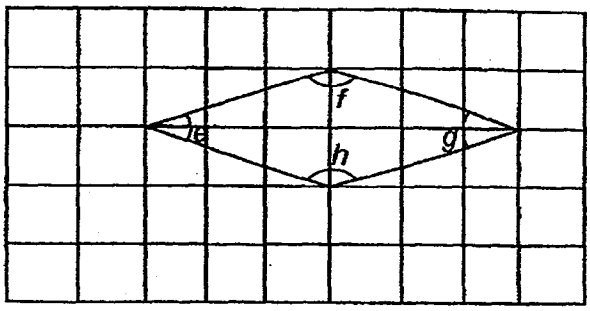
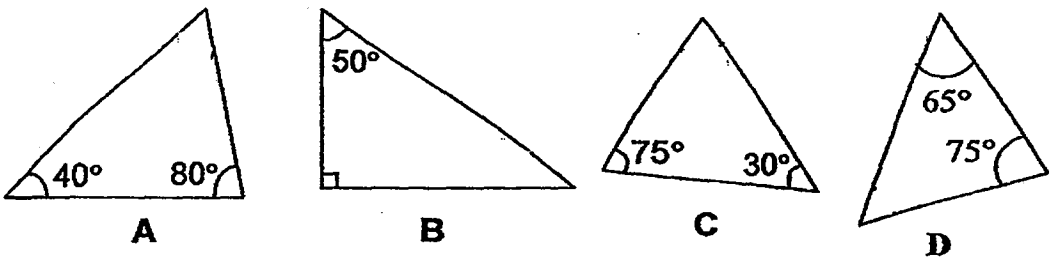



Figure B

| | Figure A | Figure B |
|---|---|---|
| (1) | All sides are of the same length. | All sides are of the same length. |
| (2) | $\angle a + \angle b = 180°$ | $\angle f + \angle h = 180°$ |
| (3) | Opposite sides are parallel to each other. | Opposite sides are parallel to each other. |
| (4) | $\angle b = \angle d$ | $\angle e = \angle f$ |

10 The triangles below are not drawn to scale. Which of the triangles is an isosceles triangle?




(1) Triangle A
(2) Triangle B
(3) Triangle C
(4) Triangle D



(Go on to the next page)

11 Mrs Tan gave her three children some money in the ratio 4 : 3 : 2. The eldest child received the greatest share of $32. How much was the smallest share?

(1) $8
(2) $2
(3) $16
(4) $25

12 In a competition, the average score of points obtained by 4 girls was 26 and the average score obtained by 8 boys was 32. What was the average score of the 12 children?

(1) 29
(2) 30
(3) 58
(4) 180

13 There are pears, apples and oranges in a box. There are altogether 120 fruits in the box, of which 30 are pears. The ratio of the number of apples to the number of oranges is 3 : 2. What percentage of the fruits are oranges?

(1) 20%

(2) 30%

(3) 40%

(4) 48%

14 A bookshop owner bought an equal number of red pens and green pens. She sold $\frac{1}{4}$ of the red pens and $\frac{11}{12}$ of the green pens. She was then left with 72 more red pens than green pens. How many pens did ~~he~~ she buy altogether?

(1) 84
(2) 108
(3) 126
(4) 216



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15 The solid figures below are made up of 1-cm cubes. The cubes are stacked on top of one another.

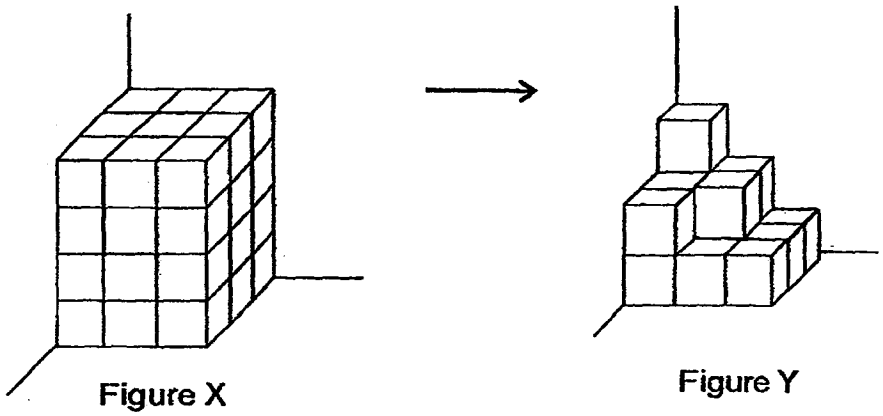

Figure X

Figure Y

How many 1-cm cubes must be removed from Figure X to form Figure Y?

(1) 10
(2) 15
(3) 21
(4) 26



(Go on to Booklet B)

# METHODIST GIRLS' SCHOOL

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## PRIMARY 5 SEMESTRAL ASSESSMENT 2 2014
## 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: 28 October 2014

| | |
|---|---|
| **Paper 1 Booklet A** | **/ 20** |
| **Paper 1 Booklet B** | **/ 20** |
| **Paper 2** | **/ 60** |
| **TOTAL** | **/ 100** |

This booklet consists of 6 printed pages including this 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** What is the remainder when you divide 790 by 60?

**Ans:** _____

**17** What is missing number in the box below?

$75 + 21 \div \square - 56 = 22$

**Ans:** _____

**18** Find the value of $24 \times 1\frac{5}{8}$

**Ans:** _____

**19** Find the sum of $5\frac{1}{2} + 1\frac{5}{6}$. Give your answer in the simplest form.

**Ans:** _____



(Go on to the next page)

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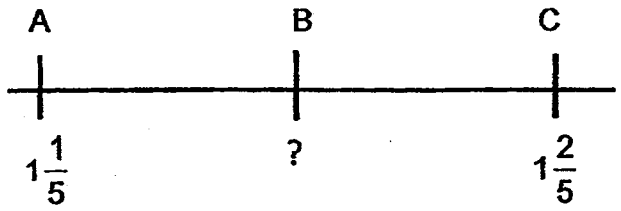
20 In the number line below, A represents $1\frac{1}{5}$ and C represents $1\frac{2}{5}$

AB = BC. What number is represented by B?

Express your answer as a decimal.




Ans: _____

21 $\frac{23}{10} + \frac{23}{100} + \frac{23}{1000} + \ldots =$ _____

Ans: _____

22 The average height of 5 boys is 1 m 48 cm. What is their total height? Give your answer in m and cm.

Ans: _____ m _____ cm

23 Express 36 minutes as a percentage of 2 hours.

Ans: _____ %



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24 The figure below shows a rectangle ABCD. BE is a straight line. Find ∠y.

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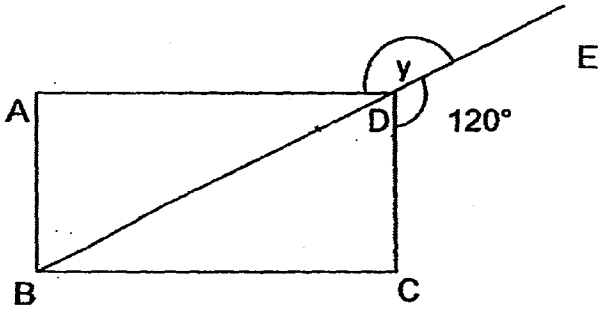
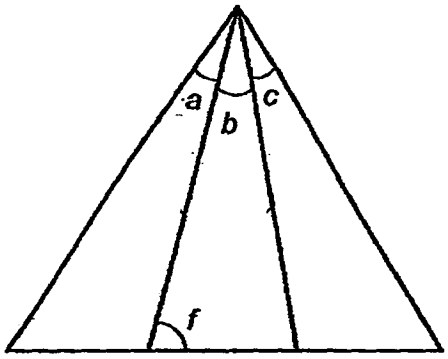



Ans: _____ °

25 The figure below shows an equilateral triangle PQT and an isosceles triangle PRS with PR = PS. ∠*a* = ∠*b* = ∠*c*. Find ∠*f*.




Ans: _____ °



(Go on to the next page)

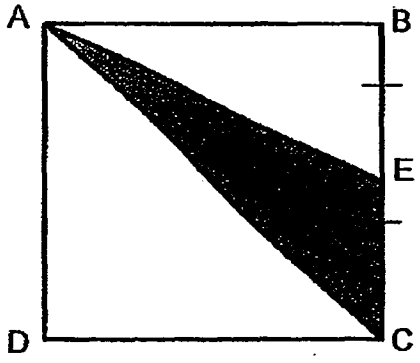
Questions **26** to **30** carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

Do not write in this space

**26** Forty women had to bake some cookies. One more woman joined the group and the rest baked 3 fewer cookies each. How many cookies did they bake altogether if each of them had to bake the same number of cookies?

**Ans:** _____

**27** ABCD is a square of area 64 $cm^2$. BE = EC.
What is the area of triangle ACE?




**Ans:** _____ $cm^2$



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28 Mrs Naidu made 3 types of curry puffs – chicken, sardine and potato. $\frac{2}{5}$ of these were chicken, $\frac{1}{3}$ were sardine and the rest were potato. What was the ratio of the number of sardine puffs to the number of chicken puffs to the number of potato puffs that Mrs Naidu made?

Do not write in this space

**Ans:** _____

29 A roll of ribbon was 5 m long. Aishah used 235 cm of it for dresses. What percentage of the roll of ribbon did she use for the dresses?

**Ans:** _____ %

30 A container contains 415 ml of water. When another 1035 ml of water is poured into the pot, 128 ml of water overflows. What is the capacity of the pot? Give your answer in ℓ and mℓ.

**Ans:** _____ ℓ _____ mℓ

End of Paper

# METHODIST GIRLS' SCHOOL

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## PRIMARY 5 SEMESTRAL ASSESSMENT 2 2014
## MATHEMATICS

## PAPER 2

Duration: 1 h 40 min

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 an approved calculator is expected, where appropriate.

Name: _____ (  )

Class: Primary 5._____

Date: 28 October 2014

60

This booklet consists of 14 printed pages including this page.

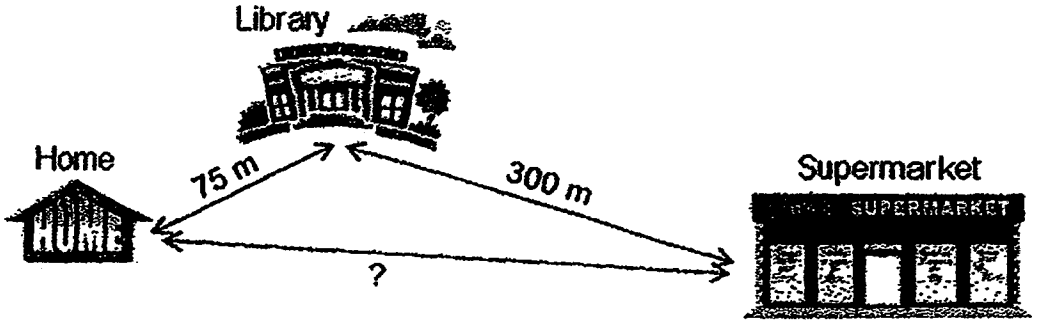
Questions **1** to **5** carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (10 marks)

Do not write in this space

**1** Kok Seng had some paint. He used $\frac{2}{5}$ of it to paint his bedroom. He then used $\frac{4}{9}$ of the remaining paint to paint his kitchen. What fraction of the paint was left? Give your answer in the simplest form.

**Ans:** _____

**2** David ran 75 m from his home to the library and then walked 300 m from the library to the supermarket. He then walked home from the supermarket. If David had run and walked a total distance of 2.05 km, what was the distance between his home and the supermarket?




**Ans:** _____ m



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3 From January to August last year, Mr Tang sold a total of 456 bags. He did not sell any bags in the next 4 months. On the average, how many bags did he sell per month last year?

**Ans:** _____

4 John drew a rectangle with a length of 30 cm and a breadth of 20 cm. His Art teacher told him to increase the length and breadth of his rectangle by 20%. What was the area of the new rectangle that he drew?

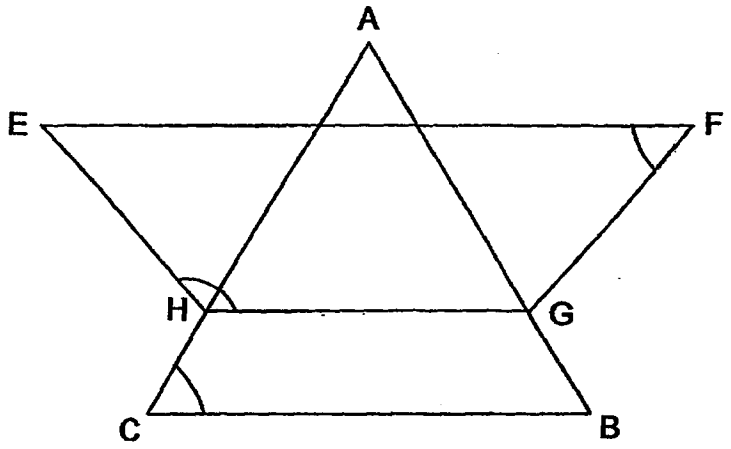
**Ans:** _____ $cm^2$



(Go on to the next page)

5 The figure below is made up of an equilateral triangle ABC and a trapezium, EFGH, and EH = FG.

What is the sum of ∠EFG, ∠EHG and ∠ACB?




Ans: _____ °

Do not write in this space



(Go on to the next page)

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)

Do not write in this space

**6** A box can either contain 150 sweets or 30 chocolate bars. Samy wants to have a mixture of sweets and chocolate bars in the box. He packs in 12 large chocolate bars.
What is the most number of sweets he can pack into the box?

**Ans:** _____ [3]

**7** Lily had $20. She bought an equal number of files and pencils. A file cost $1.80 and a pencil cost $0.90. What was the greatest number of files and pencils that she could have bought altogether?

**Ans:** _____ [3]



(Go on to the next page)

8 Sally withdrew $\frac{5}{8}$ of her savings from her bank and spent $140.

The amount she spent is $\frac{1}{6}$ of the amount she had left in the bank

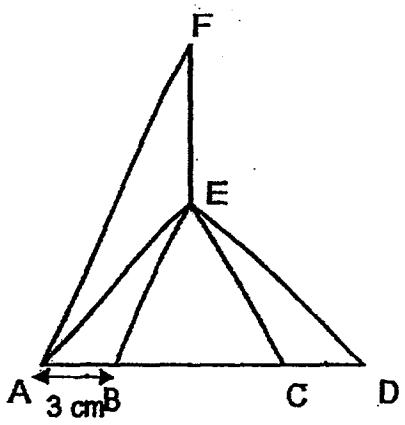
(a) How much was left in the bank?
(b) How much did she withdraw from the bank?

Do not write in this space

**Ans:** (a) _____ [1]

(b) _____ [2]

9 In the figure below, AB = CD and BC = FE. BC is twice of AB.
Find the area of triange FEA.




**Ans:** _____ [3]



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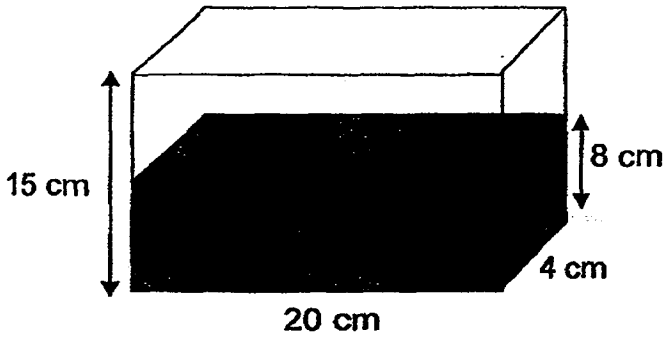
10 Sharifah bought 3 bags of flour to bake some cakes. The mass of Bag A and Bag B is 7.06 kg. The mass of Bag A and Bag C is 9.2 kg. The mass of Bag C is one and a half times the mass of Bag B. What is the mass of Bag B in grams?

Do not write in this space

**Ans:** _____ [3]

11 A tank contained some water as shown in the figure below. Ali poured 5 similar bottles of water into the tank to fill it completely. How much water did each bottle contain? Give your answers in m$\ell$.




**Ans:** _____ [3]



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12 A shop owner sold 175 T-shirts. He donated $\frac{1}{9}$ of the remaining T-shirts to a charitable organisation. He had $\frac{4}{7}$ of the T-shirts left.

(a) What fraction of the T-shirts was sold?
(b) How many T-shirts had he at first?

**Ans:** (a) _____ [2]

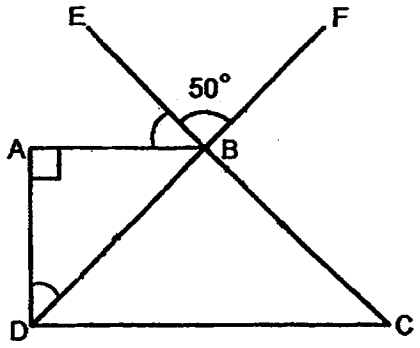
(b) _____ [2]



(Go on to the next page)

13 In the figure below, ABCD is a trapezium. BCD is an isosceles triangle. BC = BD. EC and DF are straight lines. ∠ EBF = 50°.

(a) Find ∠ ADF.
(b) Find ∠ EBA.

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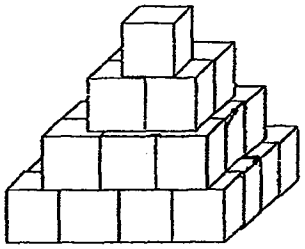
**Ans:** (a) _____ [3]

(b) _____ [1]



(Go on to the next page)

14 The solid below is made up by gluing 2-cm cubes. Each layer is a cuboid with a square base. The solid is dipped into a pail of blue paint. Find the total area of the solid which is painted blue.



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Ans: _____ [4]



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15 Siti's weekly allowance is $350. She spends $130 on food. She spends an equal amount on transport and miscellaneous items and saves $80 every week.

(a) What percentage of her weekly allowance does she spend on transport?

(b) Siti wants to buy a necklace which costs $255. She has to pay 7% GST on top of the selling price of the necklace. How many weeks will she take to save enough money to buy the necklace if she saves the same amount of money each week?

**Ans:** (a) _____ [3]

(b) _____ [2]

(Go on to the next page)

16 In May, Adrian, Benjamin and Carman spent a total of $1 510.
In June, Adrian increased his expenditure by $120, Benjamin doubled his expenditure and Carman reduced her expenditure by $130.
The amount spent by each of them then became the same.

(a) How much did Adrian spend in June?
(b) How much did Carman spend in May?

Do not write in this space

**Ans:** (a) _____ [3]

(b) _____ [2]



(Go on to the next page)

17 There were a total of 420 passengers on a train. $\frac{3}{5}$ of the passengers were adults. $\frac{1}{12}$ of the children were boys. Some girls alighted and the fraction of the passengers who were adults became $\frac{6}{7}$.

(a) How many adults were there on the train at first?
(b) How many girls were there on the train in the end?

Do not write in this space

**Ans:** (a) _____ [2]

(b) _____ [3]



(Go on to the next page)

18 Primary 5A and 5B have the same number of pupils.
The ratio of the number of boys to the number of girls in Primary 5A is 2 : 5.
The ratio of the number of boys to the number of girls in Primary 5B is 2 : 3.

(a) What is the ratio of the number of girls in Primary 5A to the number of girls in Primary 5B?

(b) In Primary 5B, $\frac{5}{7}$ of the boys passed Mathematics and $\frac{2}{3}$ of the girls passed Mathematics. What is the ratio of the number of boys who failed Mathematics to the number of girls who failed Mathematics in Primary 5B?

Do not write in this space

**Ans: (a)** _____ [2]

**(b)** _____ [3]

**End of Paper**

**Methodist Girls' School**
**Primary 5 Semestral Assessment 2 2014**
**Mathematics**

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

16) 10
17) 7
18) 39
19) 7/1/3
20) 1.3
21) 2553/1000
22) 7m 40cm
23) 30%
24) 150 °
25) 80 °
26) 40*3 = 120
41*120 = 4920
27) 16 $cm^2$
28) 5:6:4
29) 47%
30) 1litre 322ml

**Paper 2**
1) 1-2/5 = 3/5
4/9*3/5 = 4/15
1-2/5-4/15 = 1/3

2) 2050-300-75 = 1675m

3) 456/12 = 38 bags

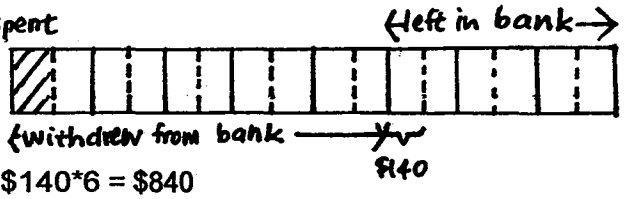
4) New length = 120/100*30 = 36 cm
New breadth = 120/100*20 = 24 cm
Area of new rectangle = 36*24 = 864 $cm^2$

5) Angle EFG + Angle EHG = 180 ° (interior angles)
Sum = 180+60 = 240 °

6) 1 chocolate bar –> 150/30 = 5 sweets
12 chocolate bars –> 12*5 = 60 sweets
150-60 = 90 sweets

7) 1 set of 1 file & 1 pencil = $1.80+$0.90 = $2.70
$20/$2.70 = 7 sets
7*2 = 14 files & pencils

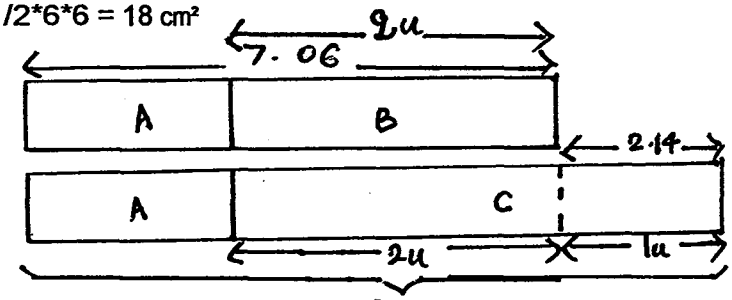
8)




a) $140*6 = $840
b) $140*10 = $1400

9) 1/2*6*6 = 18 cm²

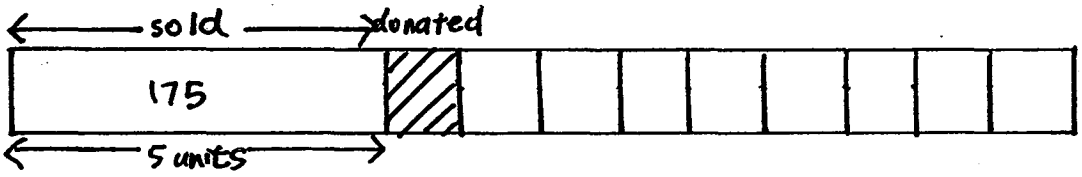
10)




1u –> 9.2-7.06 = 2.14
2u –> 2.14*2 = 4.28 kg = 4280g

11) 15-8 = 7cm
20*4*7 = 560 cm³
560/5 = 112 cm³= 112 ml

12)



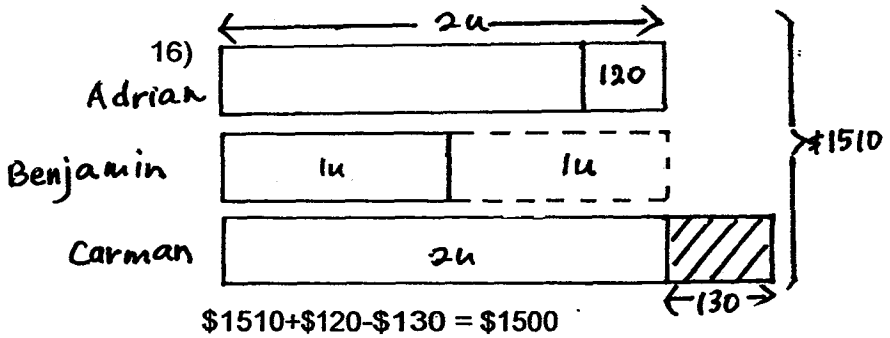

a) 5/14
b) 5u –> 175
14u –> 14/5*175 = 490 T-shirts at first

13) Angle BDC = (180-50)/2 = 65 ° (interior angles)
a) Angle ADF = 90-65 = 25 °
Angle ABD = 180-90-25 = 65 °
b) Angle EBA = 180-65-50 = 65 °

14) Each face = 2*2 = 4 cm²
Number of faces = 4*4+4*4*2+3*4+2*4+4 = 72
Total Area = 72*4 = 288 cm²

15) 350-130-80 = $140
$140/2 = $70
a) 70/350*100% = 20%
107/100*$255 = $272.85
b) 272.85/80 = 3.4
Siti will take 4 weeks.

16)




$1510+$120-$130 = $1500
$1500//5 = $300
a) $300*2 = $600
b) $600+$130 = $730

17a) 3/5*420 = 252 adults at first
b) 6u –> 252
1u –> 252/6 = 42
420-252 = 168 (children at first)
168-42 = 126 (girls alighted)
11/12*168 = 154 (girls at first)
154-126 = 28 (girls in the end)

18)

| | Boys : Girls | Total |
|---|---|---|
| 5A | 2 : 5 | 7u |
| 5B | 2 : 3 | 5u |

Since 5A & 5B have the same number of pupils,

| | | |
|---|---|---|
| 5A | 10 : 25 | 35u |
| 5B | 14 : 21 | 35u |

a) Hence, 25 : 21
b) 2/7*14 = 4 (boys failed)
1/3*21 = 7 (girls failed)
Hence, 4 : 7