METHODIST GIRLS' SCHOOL

Founded in 1887

PRIMARY 6 CONTINUAL ASSESSMENT 2015
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 6._____

Date: 3 March 2015

This booklet consists of 7 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 correct oval (1, 2, 3 or 4) on the Optical Answer Sheet.

(20 marks)

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1 Which one of the following algebraic expressions is the same as $\frac{6w}{5}$?

(1) $6 + w + 5$
(2) $6 \times w + 5$
(3) $6 \div 5 + w$
(4) $w + 5 + 6$

2 8 thousands + 12 hundreds + 36 tens + 25 ones = _____

(1) 8 073
(2) 8 181
(3) 8 505
(4) 9 585

3 $\frac{1}{4} + 0.01 + \frac{1}{20} =$ _____

(1) 0.21
(2) 0.31
(3) 0.36
(4) 0.75

(Go on the next page)

4 Siti bought a cake. She kept $\frac{2}{5}$ of it for herself and divided the remaining cake equally among her 4 children. What fraction of the cake did each child receive?

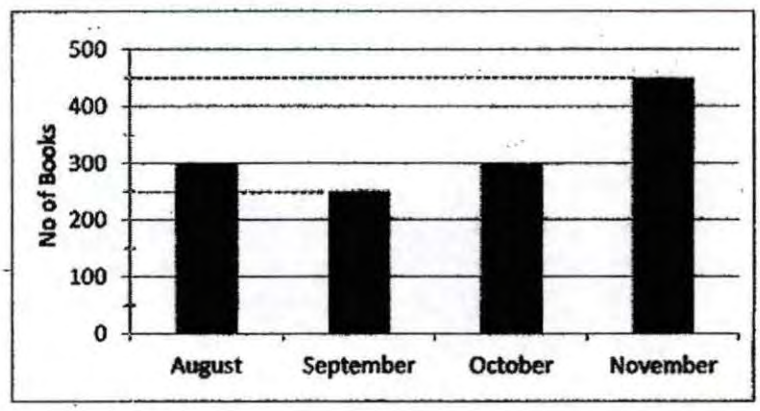
(1) $\frac{1}{10}$

(2) $\frac{3}{20}$

(3) $1\frac{3}{5}$

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

5 The graph below shows the number of books which were borrowed from a school library from August to November.

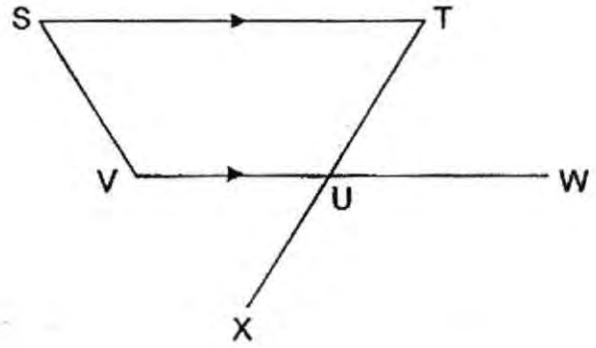


What was the average number of books that were borrowed from August to November?

(1) 300
(2) 325
(3) 650
(4) 1 300

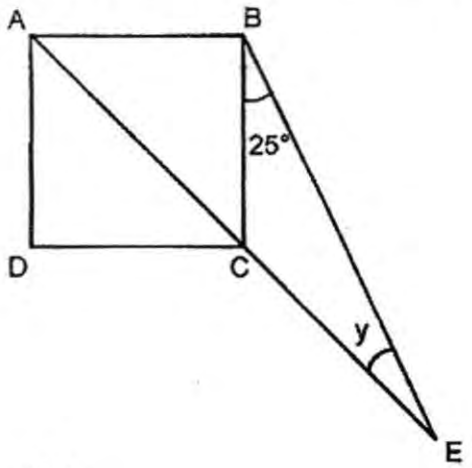
(Go on the next page)

6 In the figure below, STUV is a trapezium. TX and VW are straight lines. Which one of the following statements is **false**?



(1) $\angle TSV + \angle SVU = 180°$
(2) $\angle TUV = \angle WUX$
(3) $\angle TSV + \angle STU = 180°$
(4) $\angle VUX + \angle XUW = 180°$

7 ABCD is a square. ACE is a straight line. $\angle CBE = 25°$. Find the value of $\angle y$.



(1) 20°
(2) 25°
(3) 45°
(4) 70°

(Go on the next page)

8 Jerry and Su Ling shared $280 in the ratio 2 : 5.
How much money did Su Ling receive?

(1) $40
(2) $80
(3) $120
(4) $200

9 There are 60 marbles in a jar. There are 38 blue marbles. The rest are red marbles.
What is the ratio of the number of red marbles to the number of blue marbles in the jar?

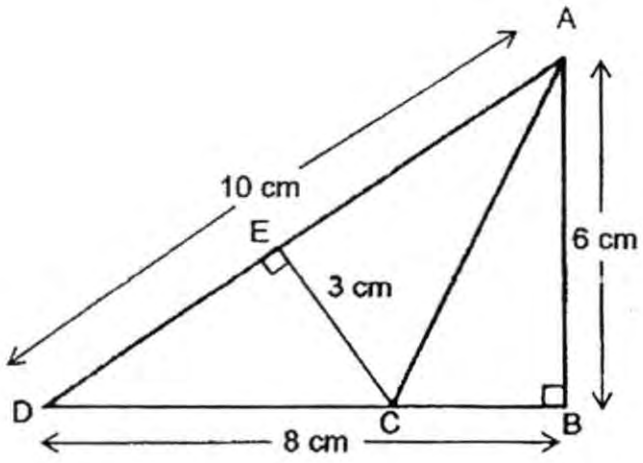
(1) 11 : 19
(2) 11 : 30
(3) 19 : 11
(4) 19 : 30

10 Lily had 5 m of cloth. She used 150 cm of it to make a table cloth and used the remaining cloth to make b handkerchiefs. How much cloth did she use for each handkerchief?

(1) $\frac{350}{b}$ cm
(2) $\frac{b}{350}$ cm
(3) $\frac{5-b}{150}$ cm
(4) $\frac{b-150}{5}$ cm

(Go on the next page)

11 Find the area of triangle ADC.



(1) $(\frac{1}{2} \times 3 \times 10)\ cm^2$

(2) $(\frac{1}{2} \times 8 \times 6)\ cm^2$

(3) $(\frac{1}{2} \times 6 \times 10)\ cm^2$

(4) $(\frac{1}{2} \times 8 \times 10)\ cm^2$

12 On a book shelf, $\frac{5}{9}$ of the books were English books. The rest of the books were Chinese books.
The ratio of English fiction books to English non-fiction books was 3 : 7.
There were 24 English fiction books. How many Chinese books were there on the book shelf?

(1) 56
(2) 64
(3) 80
(4) 144

(Go on the next page)

13 Mr Tan had 80 stamps. He gave 20% of his stamps to his son and 25% of the remaining stamps to his daughter. What percentage of his stamps was left?

(1) 45%
(2) 48%
(3) 55%
(4) 60%

14 Mary walks her dog once every two days, while Bala walks his dog once every five days. Both Mary and Bala met each other for the first time on 6 January. How many **more** times will they meet each other in January when they take their dogs for a walk?

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

15 Look at the set of numbers below.

17 , 32 , 27 , 20 , ?

What number must be added to this set of numbers to increase the average to 26?

(1) 8
(2) 24
(3) 34
(4) 122

(Go on to Booklet B)

METHODIST GIRLS' SCHOOL

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PRIMARY 6 CONTINUAL ASSESSMENT 2015
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 6._____

Date: 3 March 2015

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

This booklet consists of 8 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)

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16 What is the value of $\triangle$?

$$4 : 8 = \triangle : 24.$$

Ans: _____

17 Find the sum of the factors of 16.

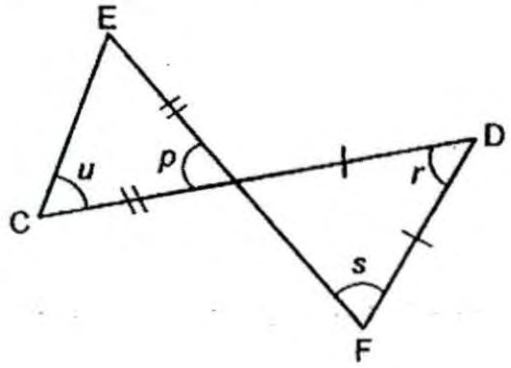
Ans: _____

18 Express 1.38 as a percentage.

Ans: _____%

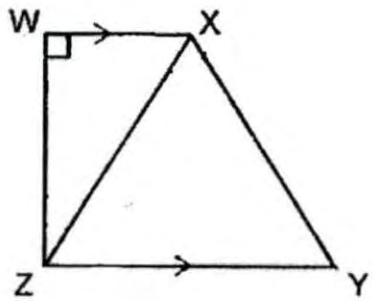
(Go on to the next page)

19 CD and EF are straight lines.
Which of the 2 marked angles in the figure are equal?



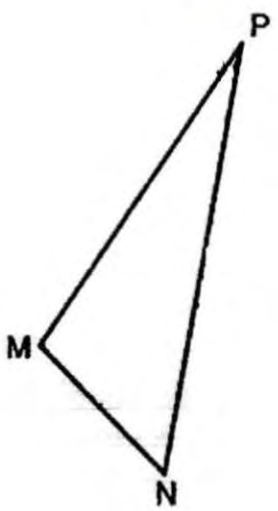
Ans: _____

20 WXYZ is a trapezium and XYZ is an equilateral triangle. Find ∠WXZ.



Ans: _____ °

21 MN is the base of the triangle MNP below. Draw the height using a ruler and label it *h*.



(Go on to the next page)

22 Petrol costs $1.75 per litre. The petrol tank in Raju's car can take 50 litres of petrol. How much does Raju have to pay for a full tank of petrol?

Ans: $ _____

23 During a 42 km race, Timothy ran $\frac{19}{21}$ of the distance and walked the remaining distance. What was the distance he walked?

Ans: _____ m

24 Mrs Ali paid $30.90 for 1 kg of king prawns. How much does 100g of king prawn cost?

Ans: $ _____

(Go on to the next page)

25 Rohaya, Penny and Mani paid $147 for a meal. Rohaya paid twice as much as Penny and half as much as Mani. How much did Rohaya pay?

(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)

---

26 Mark is *b* kg. Tom is 4 kg heavier than Mark. Zainal is 3 kg lighter than Mark. What is the total mass of the 3 boys?

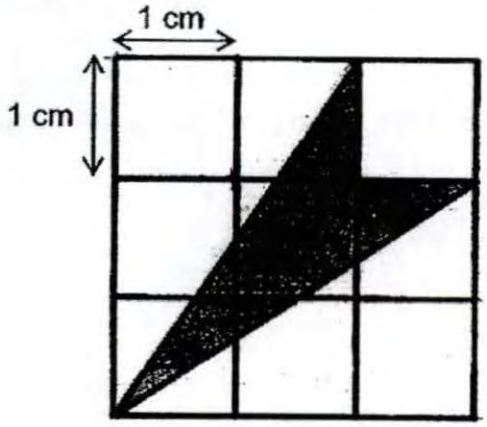
Ans: _____ kg

27 The ratio of Cathy's stickers to Rani's stickers is 1 : 5. The ratio of Taufiq's stickers to Rani's is 1 : 2. The three of them have a total of 340 stickers. How many stickers does Rani have?

Ans: _____

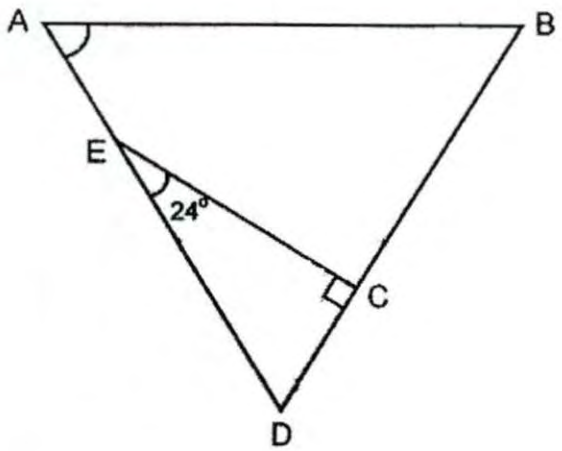
(Go on to the next page)

28 Find the area of the shaded region.



Ans: _____ cm^2

29 ABD is an isosceles triangle. AD = BD and ∠CED = 24°
Find ∠BAD.



Ans: _____ °

(Go on to the next page)

30 There were 78 puppies and 43 kittens in a pet farm. 18 puppies and 23 kittens were sold. What percentage of the animals left in the pet farm were puppies?

Ans: _____%

End of Paper

METHODIST GIRLS' SCHOOL

Founded in 1887

PRIMARY 6 CONTINUAL ASSESSMENT 2015
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 6._____

Date: 3 March 2015

/60

This booklet consists of 15 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

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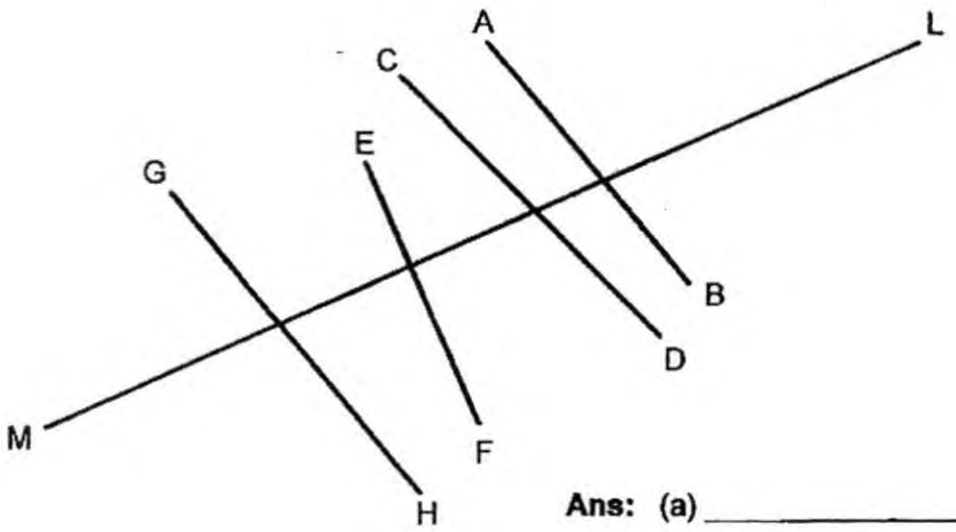
1 Meiyi bought p number of pens at 80 cents each and some pencils for $5. She gave the cashier $20. How much change did she receive?

Ans: _____ cents

2 AB, CD, EF, GH and LM are straight lines.

(a) Which 2 lines are parallel to each other?

(b) Which line is perpendicular to LM?



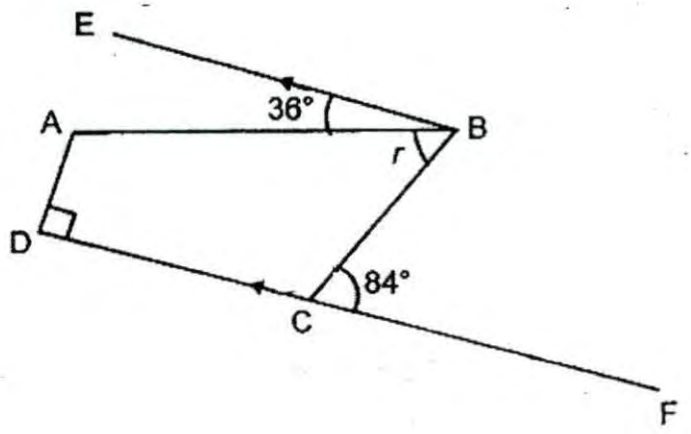
Ans: (a) _____

(b) _____

(Go on to the next page)

Do not write in this space

3 In the figure below, DF is a straight line. BE // CD. Find $\angle r$.



Ans: _____ °

4 A tank measuring 150 cm by 70 cm by 60 cm is $\frac{1}{4}$- filled with water.

How much more water is needed to make it $\frac{5}{6}$ full?

Ans: _____ cm^3

(Go on to the next page)

5 The average of 6 numbers is 30. When 2 numbers were removed, the average decreased by 5. What is the average of the 2 numbers that were removed?

Do not write in this space

Ans: _____

(Go on to the next page)

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 The ratio of the number of picture cards Yvette had to the number of picture cards Zavier had was 1 : 3.
Yvette gave Zavier 15 picture cards and the ratio became 1 : 4.
How many picture cards did Zavier have in the end?

Ans: _____ [3]

7 During a school party, each girl was given 2 cupcakes and each boy was given 3 cupcakes. The ratio of the number of girls to the number of boys in the school was 4 : 5. A total of 460 cupcakes were distributed to the children. How many boys were there in the school?

Ans: _____ [3]

(Go on to the next page)

8 128 men and some women took part in an obstacle race. The ratio of the number of men to the number of women at the start of the race was 8 : 5. The ratio of the number of men to the number of women who completed the race was 4 : 1. All the men completed the race. How many women did not complete the race?

Do not write in this space

Ans: _____ [3]

9 Mrs Rahman gave Bala some money. Bala spent $\frac{2}{5}$ of it on 2 shirts and a pair of jeans. Each shirt cost $\frac{1}{2}$ as much as the pair of jeans.

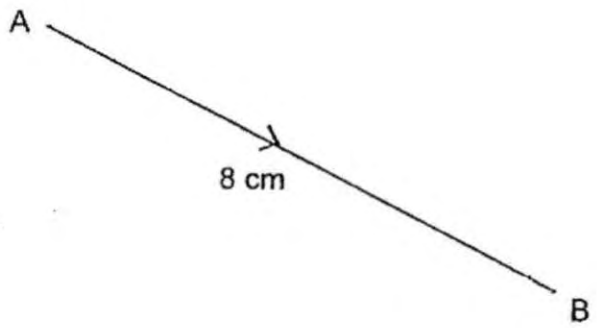
If Bala spent the remaining money Mrs Rahman gave him on jeans, how many more pairs can he buy?

Ans: _____ [3]

(Go on to the next page)

10 In the space below, draw a parallelogram ABCD in which AB // DC, AB = 8 cm, BC = AD = 5 cm and ∠ ABC = 70°.
The line AB has been drawn for you. [3m]

Do not write in this space



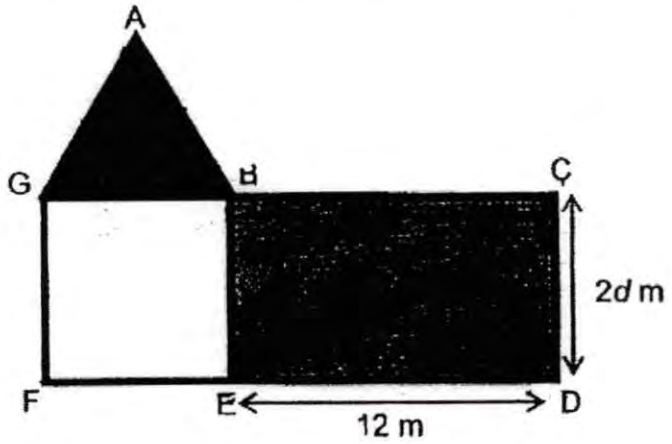
(Go on to the next page)

11 The figure below is made up of an equilateral triangle, a square and a rectangle.

Do not write in this space

(a) What is the perimeter of the figure?

(b) If $d = 3$, what is the perimeter of the shaded part?



Ans: (a) _____ [2]

(b) _____ [2]

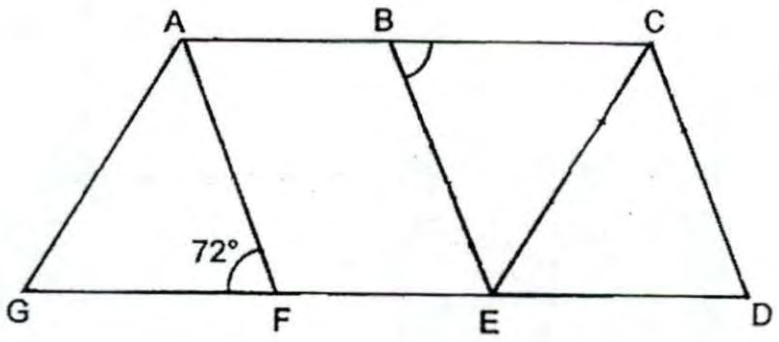
(Go on to the next page)

12 In the figure below, ACEG is a parallelogram and BCDE is a rhombus. $\angle AFG = 72°$ and AF is parallel to BE.

Do not write in this space

(a) Find $\angle CBE$.

(b) Find $\angle BCE$.



Ans: (a) _____ [1]

(b) _____ [3]

(Go on to the next page)

13 Carol bought $\frac{11}{12}$ kg of beef. She kept $\frac{1}{4}$ of it and gave $\frac{1}{5}$ of the remainder to her neighbour. She repacked the rest into smaller packets of $\frac{1}{5}$ kg each. How many small packets of beef did Carol have at most?

Do not write in this space

Ans: _____ _____ [4]

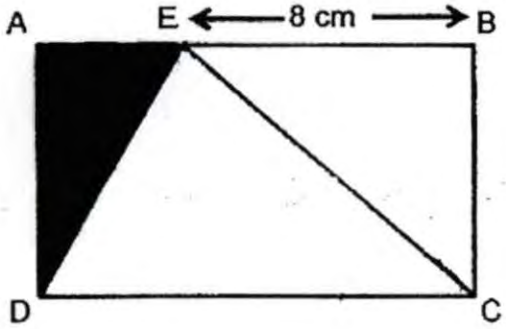
(Go on to the next page)

14 The area of rectangle ABCD is 108 cm^2. The ratio of the length of AE to the length of AB is 1 : 3. EB = 8 cm.

Do not write in this space

(a) What fraction of the figure is shaded?

(b) Find the length of AD.



Ans: (a) _____ [1]

(b) _____ [3]

(Go on to the next page)

15 Three friends, Ally, Beatrice and Claire shared the cost of a birthday present for their teacher.
The ratio of Ally's share to the total of Beatrice and Claire's share was 2 : 5.
The ratio of Beatrice's share to the total of Ally and Claire's share was 1 : 2.
Beatrice paid $25 more than Ally.

(a) Find the ratio of the Ally's share to Beatrice's share to Claire's share.

(b) What is the cost of the present?

Do not write in this space

Ans: (a) _____ [2]

(b) _____ [2]

(Go on to the next page)

16 The cost of a notebook is 5 times as much as the cost of a pen.
The cost of a pen is twice as much as the cost of an eraser.
John bought 2 notebooks, 4 pens and 4 erasers.
He gave the cashier $40 and received $16 change.

(a) What is the cost of 1 pen?

(b) How many **more** notebooks can John buy with the change that he received?

Do not write in this space

Ans: (a) _____ [3]

(b) _____ [2]

(Go on to the next page)

17 $\frac{3}{4}$ of Cara's monthly allowance is equal to $\frac{6}{7}$ of Lily's monthly allowance.
Both Cara and Lily spent the same amount each month. At the end of the month, Cara had four times as much money as Lily left.
They spent a total of $400 in a month.

(a) What fraction of Cara's monthly allowance was Lily's allowance?

(b) How much was Cara's monthly allowance?

Do not write in this space

Ans: (a) _____ [2]

(b) _____ [3]

(Go on to the next page)

18 Denise bought a set of cooking pots for $256.80, inclusive of 7% GST. Ellie bought an identical set of cooking pots during a sale for $205.44, inclusive of 7% GST.

(a) What was the original price of the set of pots before the ~~sale~~ GST?

(b) What was the percentage discount Ellie enjoyed before the 7% GST?

Do not write in this space

Ans: (a) _____ [2]

(b) _____ [3]

End of Paper

METHODIST GIRLS' SCHOOL
CONTINUAL ASSESSMENT 2015
MATHEMATICS
Paper 1

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

16) 12

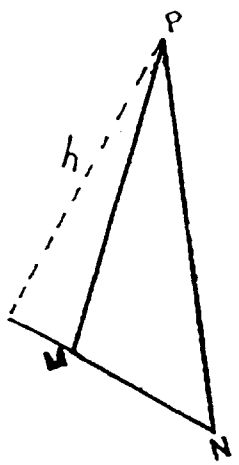
17) 31

18) 138%

19) Angle p & angle s

20) 60°

21)



22) $1.75x50 = $87.50

23) 4000 m

24) $3.09

25) 7u -- $147
2u -- 2/7x147 = $42

26) (3b+1) kg

27) 17u -- 340
10u -- 10/17x340 = 200 stickers

28) 3x3-1x1-(1/2x3x2)-(1/2x3x2) = 2 sq cm

29) 180°-90°-24° = 66°
(180°-66°)/2 = 57°

30) Number of puppies = 78-18 = 60
Number of kittens = 43-23 = 20
60/(20+60)x100% = 75%

Paper 2

1) 2000-500-80xp = (1500-80p) cents

2a) GH//AB
b) EF

3) 86°-36° = 48°

4) (5/6-1/4)x60x150x70 = 367500 cubic cm

5) 30x6 = 180
30-5 = 25
25x4 = 100
180-100 = 80
80÷2 = 40

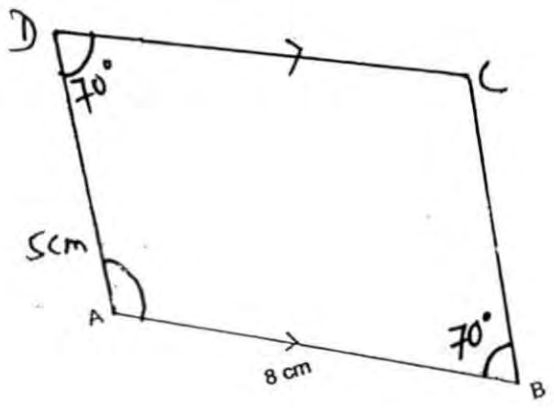
6) Y : Z total
1 : 3 4u
1 : 4 5u
---
5 : 15 20u
4 : 16 20u
1u -- 15
16u -- 16x15 = 240 picture cards

7) 4x2+5x3 = 23
23u -- 460
15u -- 15/23x460 = 300
300÷3 =100 boys

8) 8u -- 128
3u --3/8x128 = 48 women

9) 2 shirts = 1 pair of jeans
2u -- 2 pairs of jeans
3u -- 3 pairs of jeans

10)



11a) (10d+24) m
b) 10x3+24 = 54 m

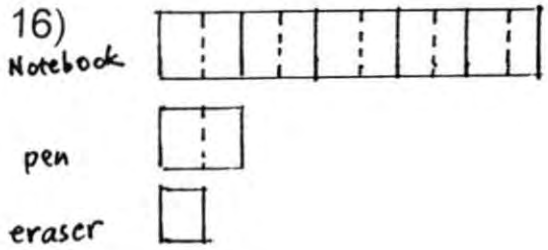
12a) 72°
54°

13) 4/5x3/4x11/12 = 11/20
11/20÷5 = 2.75
Ans: 2 small packets

14a) 1/6
b) 4+8 = 12
108÷12 = 9 cm

15a) A : B+C total
2 : 5 7u
B : A+C
1 : 2 3u
since there is no change in total amount of money, so find total common units
A : B+C
6 : 15 21u
B : A+C
7 : 14 21u
A : B : C
6 : 7 : 8
b) 1u -- $25
21u -- 21x$25 = $525

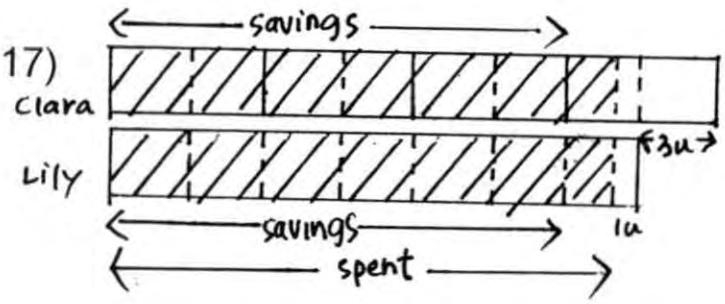
16)



a) 32u -- $(40-16) = $24
2u -- 2/32x$24 = $1.50

b) Cost of a notebook = $1.50x5 = $7.50
$16÷$7.50 ≈ 2 notebooks

17)



a) 7/8

b) 40u -- $400
24u -- 24/40x$400 = $240

18a) 107% -- $256.80
100% -- 100/107x$256.80 = $240

b) 107% -- $205.44
100% -- 100/107x$205.44 = $192
(240-192)/240x100% = 20%