METHODIST GIRLS' SCHOOL

Founded in 1887

PRIMARY 6 CONTINUAL ASSESSMENT 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 6._____

Date: 4 March 2014

›klet 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. What does the digit 8 stand for in 5 068 134?

   (1) 8 tens
   (2) 80 tens
   (3) 800 tens
   (4) 8 000 tens

2. Simplify $12 + 7m - 8 - 4m$

   (1) $4 + 3m$
   (2) $4 - 11m$
   (3) $8 - 3m$
   (4) $20 + 11m$

3. 30 books cost \$p. What is the expression for the cost of 2 such books? Express your answer in terms of p.

   (1) $\$(\frac{30}{p} \times 2)$
   (2) $\$(30p \times \frac{1}{2})$
   (3) $\$(\frac{p}{30} \times 2)$
   (4) $\$(\frac{1}{30p} \times 2)$

(Go on to the next page)

4. Find the value of $5 \div \frac{3}{8}$

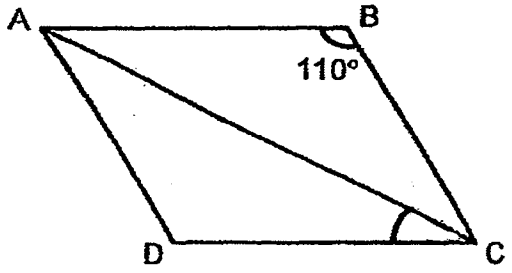
(1) $\frac{3}{40}$

(2) $1\frac{7}{8}$

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

(4) $13\frac{1}{3}$

5. ABCD is a rhombus $\angle ABC = 110°$. Find $\angle ACD$.



(1) 35°

(2) 40°

(3) 55°

(4) 70°

6. Li Ming has $\frac{4}{5}$ as many stickers as Yee Mun. What is the ratio of the total number of stickers they have to the number of stickers Yee Mun has?

(1) 4 : 9

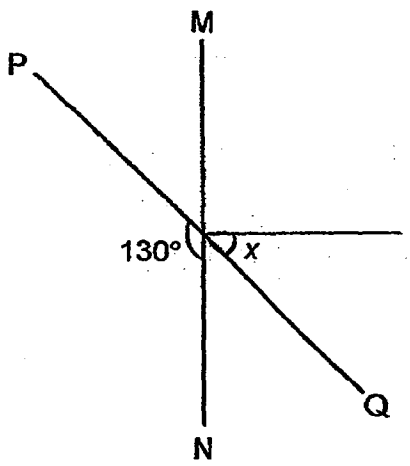
(2) 5 : 9

(3) 9 : 5

(4) 14 : 9

(Go on to the next page)

7. MN and PQ are straight lines. Find $\angle x$.



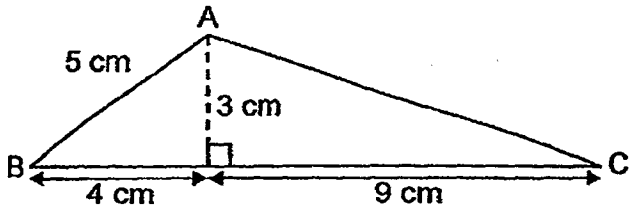
(1) 30°

(2) 40°

(3) 45°

(4) 50°

8. What is the area of triangle ABC in the figure?



(1) 13.5 cm^2

(2) 19.5 cm^2

(3) 22.5 cm^2

(4) 32.5 cm^2

(Go on to the next page)

9. What is the missing number in the box?

$45 : 18 = 10 : \square$

(1) 5

(2) 2

(3) 9

(4) 4

10. Ribbon A is 12 m long. The total length of Ribbon B and Ribbon C is 12 m long. What is the average length of the 3 ribbons?

(1) 12 m

(2) 8 m

(3) 6 m

(4) 4 m

11. The mass of a box with 40 identical screws is 700 g. When 10 more screws were added into the box, the mass of the box and the screws became 850 g. What is the mass of each screw in grams?

(1) 14

(2) 15

(3) 17.5

(4) 21.25

(Go on to the next page)

12. The table below shows the savings of Siti over 4 weeks.

Week	Savings
1	$120
2	?
3	$170
4	$150

The average savings for the 4 weeks was $160.
How much did she save in Week 2?

(1) $200

(2) $220

(3) $300

(4) $320

13. A number X is 20% less than another number Y.
If Y = 150, what is the value of X?

(1) 30

(2) 96

(3) 120

(4) 125

14. The ratio of the length of a rectangle to the breadth of the rectangle is 7 : 4. How much longer is the length of the rectangle than the breadth of the rectangle if the perimeter of the rectangle is 132 cm?

(1) 18 cm

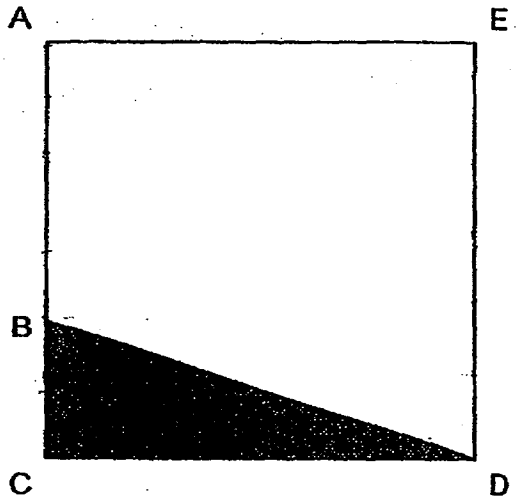
(2) 22 cm

(3) 36 cm

(4) 44 cm

(Go on to the next page)

15. In the figure below, ACDE is a square. The length of BC is $\frac{1}{3}$ of the length of CD. What fraction of the figure is **not** shaded?



(1) $\frac{1}{9}$

(2) $\frac{1}{6}$

(3) $\frac{5}{6}$

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

(Go on to Booklet B)

METHODIST GIRLS' SCHOOL

Founded in 1887

PRIMARY 6 CONTINUAL ASSESSMENT 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 6._____

Date: 4 March 2014

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.

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. 2 hundreds + 20 tenths + 20 hundredths is _____.

Ans: _____

17. Mrs Chan bought 1 kg 500 g of flour. She used some flour to bake 48 muffins. For every 12 muffins, she used 200 g of flour. How much flour was left?

Ans: _____kg

18. Find the value of 21.84 ÷ 8.

Ans: _____

19. Express 2.08 as a percentage.

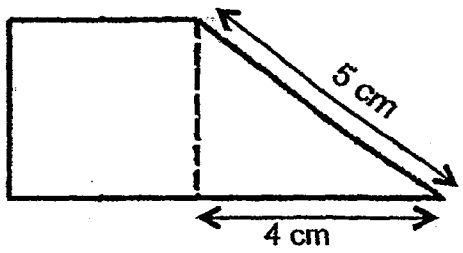
Ans: _____%

(Go on to the next page)

20. The ratio of the number of pears to the number of oranges is 7 : 2. Express the number of oranges as a fraction of the total number of pears and oranges.

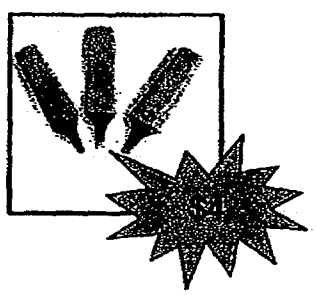
Ans: _____

21. The figure below is made up of a square and a triangle. The perimeter of the figure is 18 cm. Find the area of the triangle.



Ans: _____ cm^2

22. Highlighters are sold in packets of 3 highlighters. Each packet is sold at $4. John has $30. What is the maximum number of highlighters that he can buy?



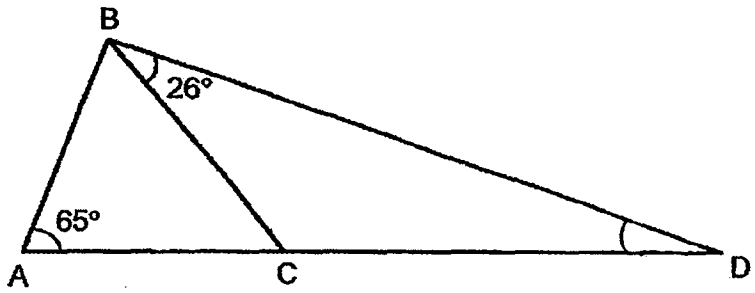
Ans: _____

(Go on to the next page)

23. 1 742 849 people visited the zoo in 2013. Round off the number of visitors to the nearst thousand.

Ans: _____

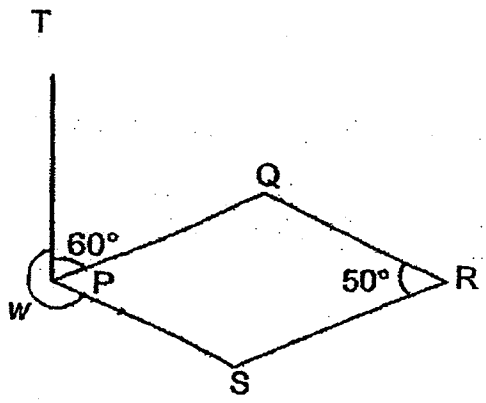
24. In the figure below, ACD is a straight line. ABC is an isosceles triangle, $AC = BC$, $\angle BAC = 65°$, $\angle CBD = 26°$. Find $\angle CDB$.



Ans: _____ °

(Go on to the next page)

25. In the figure below, PQRS is a parallelogram, $\angle QRS = 50°$ and $\angle TPQ = 60°$. Find $\angle w$.



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)

---

26. Andy had some marbles. 20% of them are blue and the rest are yellow. He gave away half of his blue marbles and 25% of his yellow marbles. What percentage of his marbles were left?

Ans: _____%

27. Jean and Peter had some sweets in the ratio 7 : 5. After Jean gave away 26 sweets, the ratio became 3 : 4. How many sweets did they have altogether at first?

Ans: _____

28. The total height of Ali and John is Ym. Ali is 5 cm shorter than John. Express John's height in terms of Y.

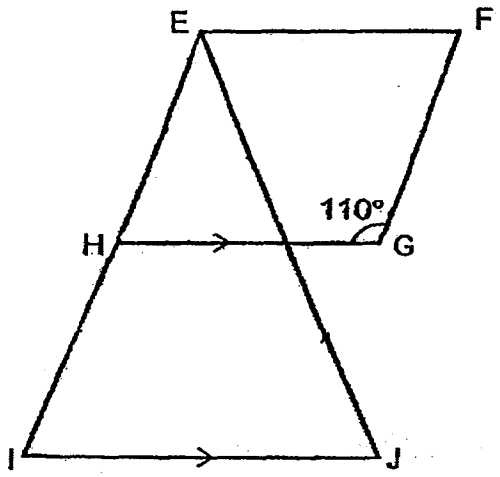
Ans. _____cm

(Go on to the next page)

29. The ratio of the number of pupils in Class A to the number of pupils in Class B is 5 : 3. 60% of the pupils in Class A wear spectacles while $\frac{1}{3}$ of the pupils in Class B do not wear spectacles. Find the ratio of the number of pupils in Class A who wear spectacles to the number of pupils in Class B who wear spectacles.

Ans: _____

30. EFGH is a rhombus and EIJ is an isosceles triangle. HG is parallel to IJ, EI = EJ and ∠FGH = 110°. Find ∠IEJ.



Ans: _____ °

End of Booklet B

METHODIST GIRLS' SCHOOL

Founded in 1887

PRIMARY 6 CONTINUAL ASSESSMENT 2014
MATHEMATICS

PAPER 2

Total Time: 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: 4 March 2014

/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)

---

1 Sam bought 40 pencils at \$4y and 10 erasers at 90 cents each. He paid the cashier \$30 for all the pencils and erasers. How much change did he receive?

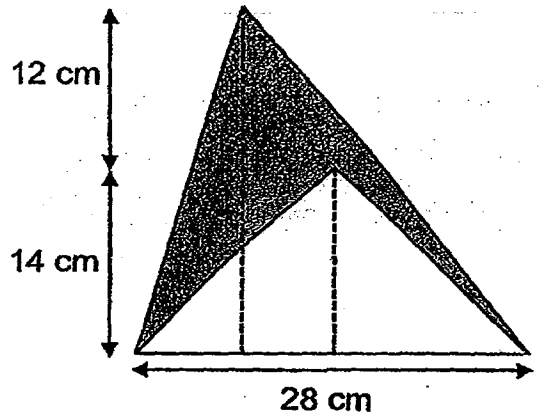
Ans: \$_____

2. The ratio of the number of books Anne had to the number of books Shannon had was 2 : 3. After Anne gave away 5 of her books, Shannon had twice as many books as Anne. How many books did Anne have at first?

Ans: _____

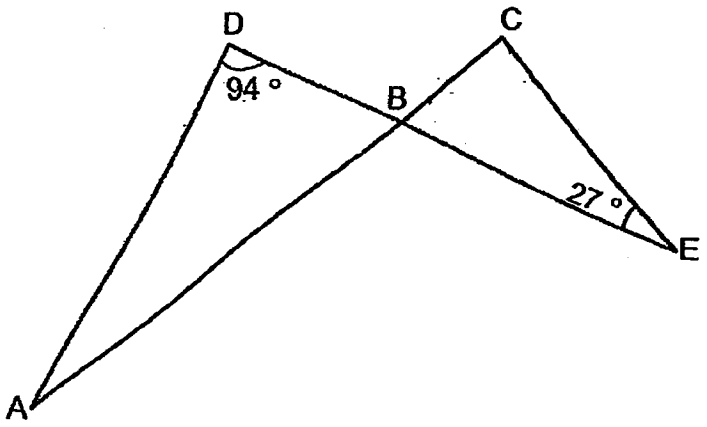
(Go on to the next page)

3. Find the area of the shaded part in the figure below.



Ans: _____ cm^2

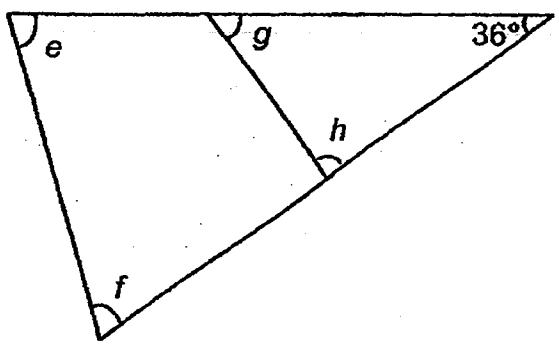
4. In the figure below, ABC and DBE are straight lines.
$\angle ADB = 94°$, $\angle BCE = 90°$ and $\angle BEC = 27°$. Find $\angle DAB$.



Ans: _____ °

(Go on to the next page)

5. In the figure below, find the sum of $\angle e$, $\angle f$, $\angle g$ and $\angle h$.



Ans: _____ °

(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)

---

6. $\frac{5}{8}$ of the animals on a farm are goats. $\frac{4}{9}$ of the remaining animals are sheep and the rest are cows. Express the ratio of the number of goats to the number of sheep to the number of cows on the farm.

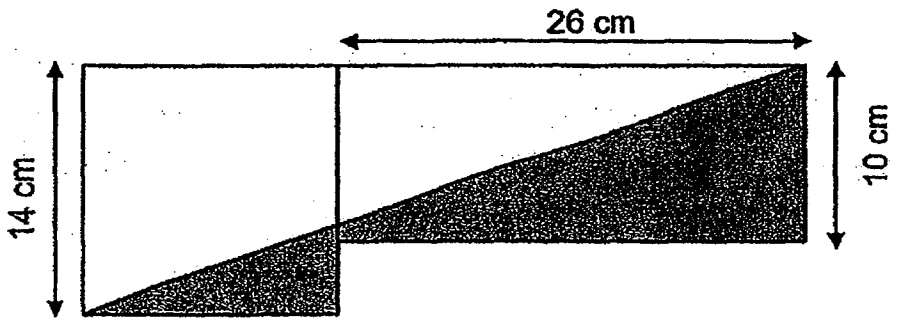
Ans: _____ [3]

7. Miss Lim wants to distribute a packet of sweets to her pupils. If she gives 4 sweets to each pupil, she will have 8 sweets left. If she gives 6 sweets to each pupil, she will be short of 68 sweets. How many pupils are there in the class?

Ans: _____ [3]

(Go on to the next page)

8. The figure below is made up of a rectangle and a square.
What is the ratio of the area of the shaded part to the area of the unshaded part?



Ans: _____ [3]

(Go on to the next page)

9. 4 different odd numbers, each greater than 33, have an average of 50. Given that the sum of 2 numbers is 108, what is the largest possible value of one of the remaining 2 numbers?

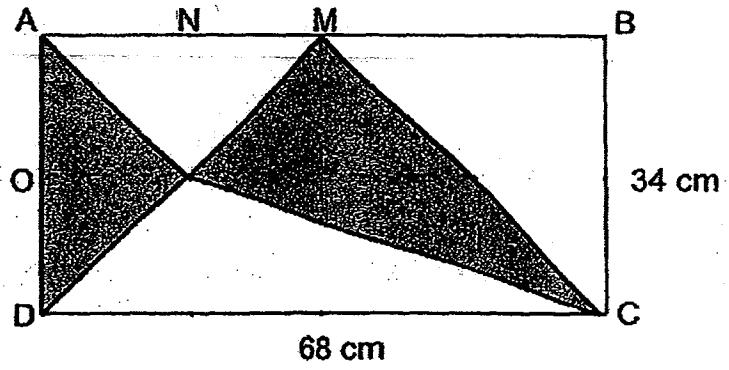
Ans: _____ [3]

10. During Chinese New Year, Mrs Lim used 145 $2 notes to pack red packets. Each red packet contained a value of either $4 or $6. After packing, she counted all the red packets and found that she had 60 red packets. Find the number of red packets that contained $4.

Ans: _____ [4]

(Go on to the next page)

11. The figure below shows a rectangle ABCD. M is the mid-point of AB, N is the mid-point of AM and O is the mid-point of AD. Find the shaded area.



Ans: _____ [3]

(Go on to the next page)

12 Ashley is 8a years old. She is 6 years younger than her sister but 33 years younger than her mother.

(a) How old will her sister be in 4 years' time?
Give your answer in terms of a.

(b) If $a = 3$, what is the total age of Ashley and her mother in 4 years' time?

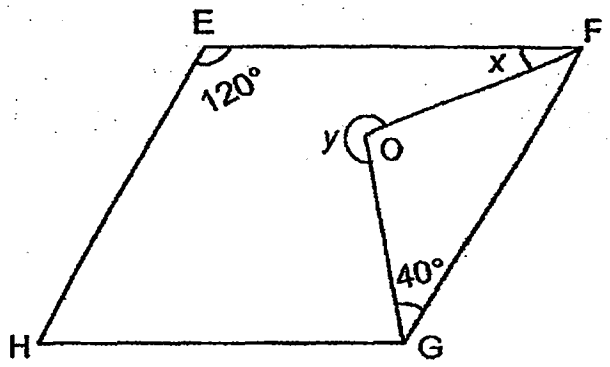
Ans: (a)_____ [2]

(b)_____ [2]

(Go on to the next page)

13. In the figure below, EFGH is a parallelogram and $\angle FEH = 120°$.
FOG is an isosceles triangle with OF = OG and $\angle OGF = 40°$.
(a) Find $\angle x$.

(b) Find $\angle y$.



Ans: (a) _____ [2]

(b) _____ [2]

(Go on to the next page)

14. There were 1250 adults in a train at the start of the journey.
40% of the adults were men. At the next train station, some adults boarded the train and then the number of men became $\frac{4}{11}$ of the total number of adults. There were twice as many women as men that boarded the train.

(a) How many women boarded the train?

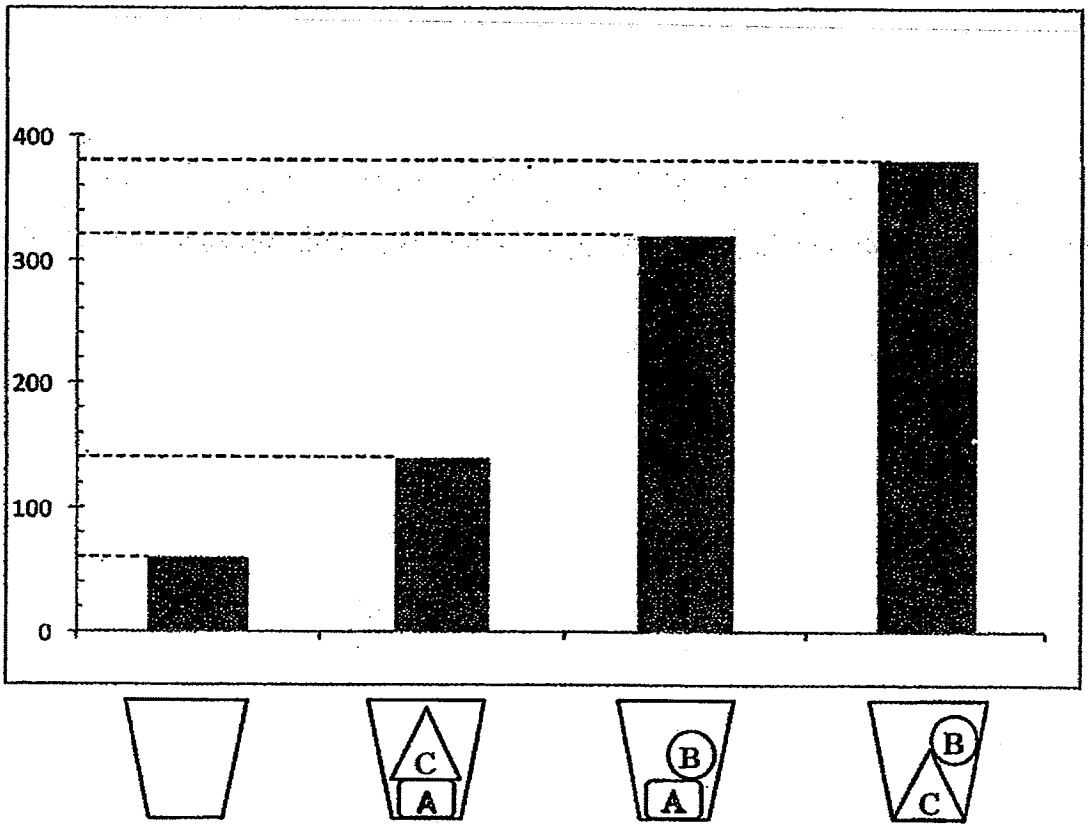
(b) How many adults were there in the train in the end?

Ans: (a)_____ [3]

(b)_____ [1]

(Go on to the next page)

15. The graph below shows the mass of a jug when empty and when different combinations of objects A, B and C are placed in the ~~cup~~ jug.
What is the ratio of the mass of object A to the mass of object C?



Ans: _____ [4]

(Go on to the next page)

16. Dinesh had some fiction and non-fiction books. The number of fiction books was $\frac{4}{9}$ of the total number of books he had. After he had donated 80 fiction books and 25 non-fiction books, there were 20% as many fiction books as non-fiction books. Find the total number of books Dinesh had at first.

Ans: _____ [5]

(Go on to the next page)

17. Mrs Raja bought some butter cakes and chocolate cakes for a party. She bought 4 more butter cakes than chocolate cakes. Each butter cake cost $12 and each chocolate cake cost $6 more than a butter cake. She spent $378 on all the cakes. How many cakes did Mrs Raja buy altogether?

Ans: _____ [5]

(Go on to the next page)

18. Betty had 25% as many red buttons as blue buttons. For every dress she made, $\frac{3}{8}$ of the buttons used were red and the rest were blue.
She used up all her red buttons to make the dresses. She had 28 blue buttons left.

(a) How many red buttons did she have at first?

(b) How many dresses did she make?

Ans: (a)_____ [3]

(b)_____ [2]

End of Paper

Exam Paper 2014 Answer Sheet

School: METHODIST GIRLS' SCHOOL
Subject: PRIMARY 6 MATHEMATICS
Term: CA1

Paper 1

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

16. 202.20

17. 0.7

18. 2.73

19. 208

20. $^{2}/_{9}$

21. 6

22. 21

23. 1743000

24. 24

25. 250

26. **70**

27. **96**

28. $(^{100y + 5}/_{2})$

29. **3 : 2**

30. Angle EHG → 180 – 110 = 70
Angle IEJ → 180 – (70 x 2) = **40**

Paper 2

1. $30 - $4y - $9 = **$(21 - 4y)**

2. A : S
   2 : 3
   1 : 2
   4 : 6
   3 : 6
   1u → 5
   4u → **20 books**

3. A → $^1/_2$ x 28 x 26 = 364cm^2
   B → $^1/_2$ x 28 x 14 = 196 cm^2
   364 – 196 = **168cm^2**

4. Angle CBE → 180 – 27 – 90 = 63°
   Angle DAB → 180 – 63 – 94 = **23°**

5. Angle g + Angle h → 180 – 36 = 144°
   Angle e + Angle p → 180 – 36 = 144°
   Angle g + Angle h + Angle e + Angle f → 144 + 144 = **288°**

6. $^5/_8$ goats = $^{15}/_{24}$ goats
   $^4/_9$ x $^3/_8$ = $^1/_6$ = $^4/_{24}$ sheeps
   $^5/_9$ x $^3/_8$ = $^5/_{24}$ cows
   G : S : C
   15 : 4 : 5

7. No. of pupils: X
   (X x 4) + 8 = (X x 6) – 68
   4X + 8 = 6X – 68
   76 = 2X
   X = **38 pupils**

8. 26 + 14 = 40cm
   10 x 26 = 260cm^2
   14 x 14 = 196cm^2
   260 + 196 = 456cm^2
   $^1/_2$ x 40 x 14 = 280cm^2
   456 – 280 = 176cm^2
   S : NS
   176 : 280
   22 : 35

9. 50 x 4 = 200
   200 – 108 = 92
   92 ÷ 2 = 46
   45, 43, 41, 37, 35
   47, 49, 51, 55, **57**

10.

No. of $4	No. of $6	Total amt of money ($4)	Total amt of money ($6)	Total amt ($4, $6)
25	35	$100	$210	$310 (wrong)
35	25	$140	$150	$290 (correct)

$2 x 145 = $290
Answer: **35 red packets**

11. 34 ÷ 2 = 17
A → $^1/_2$ x 68 x 17 = 578cm^2
68 ÷ 2 = 34cm
B → $^1/_2$ x 34 x 34 = 578cm^2
C → $^1/_2$ x 17 x 34 = 289cm^2
68 x 34 = 2312 cm^2
2312 – 578 – 578 – 289 = **867cm^2**

12. (a) 8a + 6 + 4 = **8a + 10**
(b) 8 x 3 = 24
24 + 33 = 57
57 + 24 + 8 = **89 years old**

13. (a) Angle X → 180 – 120 – 40 = 20°
40 x 2 = **80°**
(b) Angle Y → 360 – (180 – 80) = **260°**

14. (a) M : W
40 : 60
2 : 3
4 : 7
1250 ÷ 5 = 250
250 x 4 = **1000 women**
(b) 250 x 11 = **2750 adults**

15. A + C = 140
A + B = 320
C + B = 380
140 + 320 + 380 = 840
840 – (60 x 3) = 660
660 ÷ 2 = 330 (A + B + C)
330 – (380 – 60) = 10 (A)
330 – (320 – 60) = 70 (B)
A : C
10 : 70
1 : 7

16. F : NF
4u : 5u
-80 -25
1p 5p

F : NF
20u : 5u
-400 -25
5p 5p

20u – 400 = 5u – 25
20u – 5u = 400 – 25
15u = 375
1u = 25
9u = **225 books**

17. B → $12
C → $18
12 x 4 = $48
378 – 48 = $330
12 + 18 = $30
330 ÷ 30 = 11
11 + 11 + 4 = **26 cakes**

18. (a) R : B
25 : 100
1u (3p) : 4u (12p)
-3p : -5p
0 7p
1u → 3p
4u → 12p
7p → 28
p → 4
3p → **12 buttons**
(b) 12 ÷ 3 = **4 dresses**