HENRY PARK PRIMARY SCHOOL
2013 SEMESTRAL EXAMINATION 1
MATHEMATICS

PRIMARY 5
PAPER 1
(BOOKLET A)

Name: _____ (   )

Class: Primary 5_____

Marks:

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

Total Time for Booklets A and B: 50 minutes

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.

Questions 1 to 10 carry 1 mark each. Questions 11 to 15 carry 2 marks each.
For each of the questions, four options are given. One of them is the correct answer. Choose the correct answer (1, 2, 3 or 4). Shade the correct oval on the Optical Answer Sheet provided. (20 marks)

1. The number of bees in a hive was 37 786.
   Round off this number to the nearest thousand.

   (1) 30 000

   (2) 37 000

   (3) 38 000

   (4) 40 000

2. Which of the following shows 8764 ÷ 400?

   (1) 8764 ÷ 4 × 100

   (2) 8764 ÷ 100 × 4

   (3) 8764 × 100 ÷ 4

   (4) 8764 ÷ 4 ÷ 100

3. For every jersey that David sells, he earns $7.
   A bonus of $15 is given for every 10 jerseys sold.
   How much does David get if he sells 10 jerseys?

   (1) $22

   (2) $32

   (3) $85

   (4) $150

4. Find the value of $28 + 42 \div 7 \times 3 - 2$.

    (1) 10

    (2) 28

    (3) 44

    (4) 100

5. What is the difference between $1\frac{3}{4}$ and $3\frac{1}{2}$?

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

    (2) $2\frac{1}{4}$

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

    (4) $2\frac{3}{48}$

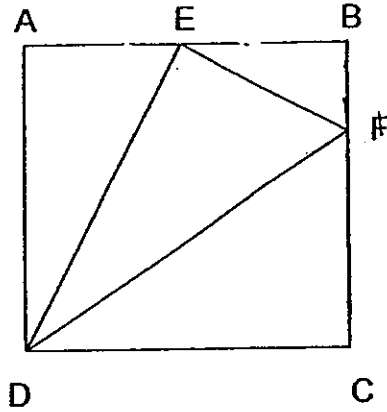6. $\frac{2}{3}$ of Mr Tan's salary is \$420. What is Mr Tan's salary?

    (1) \$280

    (2) \$630

    (3) \$840

    (4) \$1260

7. ABCD is a square of length 12 cm. AE = EB = 6 cm.

 BF is $\frac{1}{3}$ the length of BC. What is the area of triangle CDF?

(1) 18 cm²

(2) 24 cm²

(3) 48 cm²

(4) 54 cm²

8. There are 27 girls and 18 boys in the school canteen. What is the ratio of number of boys to the total number of students at the school canteen?

(1) 2 : 3

(2) 3 : 2

(3) 3 : 5

(4) 2 : 5

Page 3

9. The number cupcakes in 3 boxes is in the ratio 6 : 5 : 9.
There are 15 cupcakes in the box with the least number of cupcakes.
How many cupcakes are there in the box which has the most number
of cupcakes?

   (1) 16

   (2) 18

   (3) 19

   (4) 27

10. The length of a cube is 8 cm. What is its volume?

   (1) 48 cm^3

   (2) 64 cm^3

   (3) 384 cm^3

   (4) 512 cm^3

11. Mr Tan distributes 680 stickers equally among 35 pupils and finds that
he has some stickers left. How many stickers are left?

   (1) 15

   (2) 16

   (3) 19

   (4) 20

12. The perimeter of the square base of a tank is 24 m. Its height is 7 m. What is the volume of the tank?

(1) $42 \, m^3$

(2) $84 \, m^3$

(3) $168 \, m^3$

(4) $252 \, m^3$

13. After spending $\frac{1}{2}$ of his money on a bicycle and $\frac{1}{4}$ of his remaining money on a basketball, Joseph had $45 left.
How much had he spent altogether?

(1) $60

(2) $75

(3) $120

(4) $135

14. Mother gave $840 to her 3 children in the ratio $7:2:5$. What is the difference in amount between the smallest and largest share?

(1) $60

(2) $120

(3) $180

(4) $300

15. Mary saves a certain amount of money every day. From Monday to Friday, she saves $1 per day. On Saturday and Sunday, she saves $3 per day. What is the least number of days Mary will take to save $72?
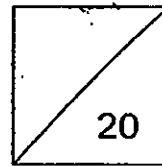
    (1) 48

    (2) 44

    (3) 24

    (4) 18
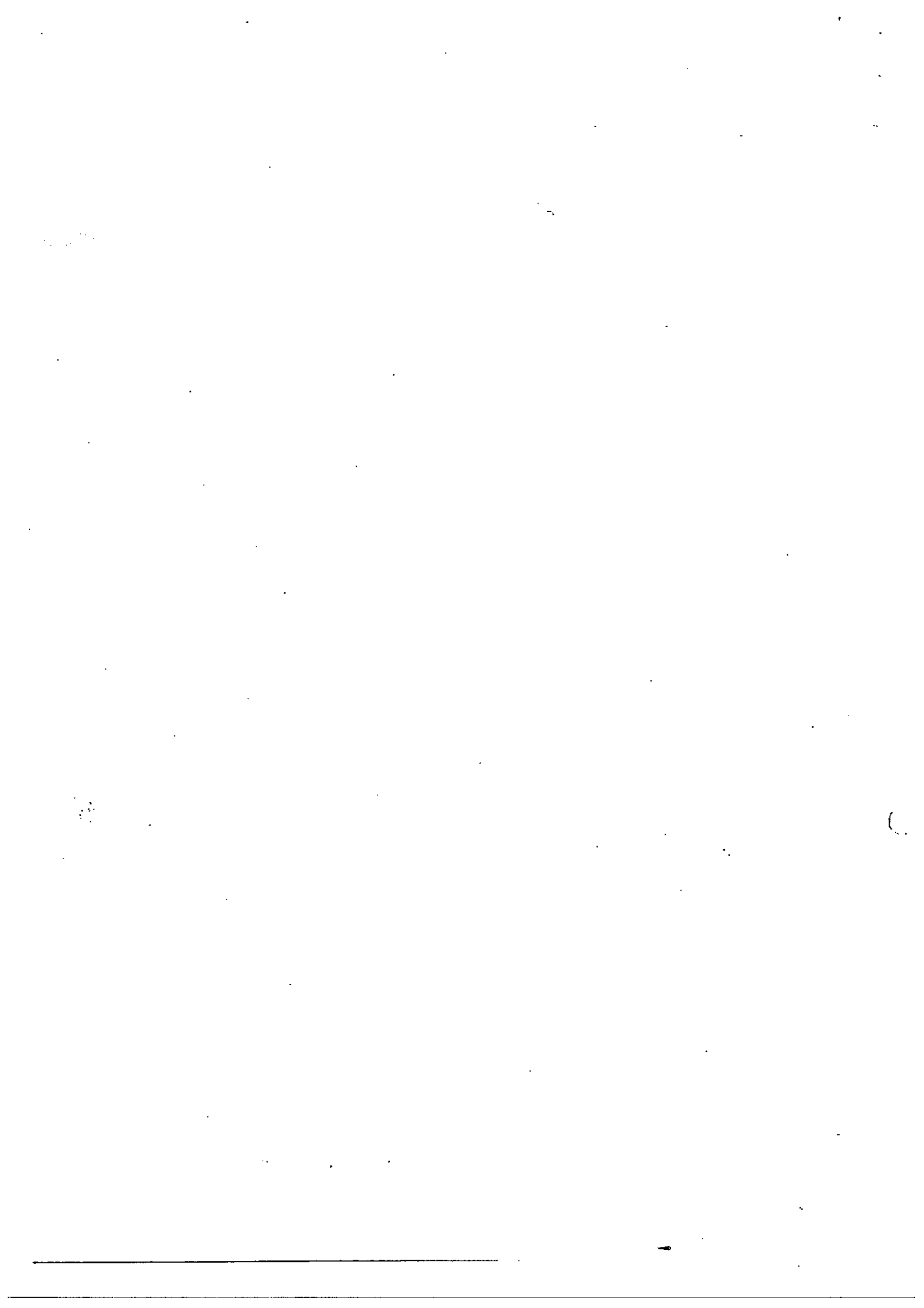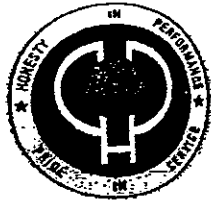
HENRY PARK PRIMARY SCHOOL
2013 SEMESTRAL EXAMINATION 1
MATHEMATICS

PRIMARY 5

PAPER 1
(BOOKLET B)

Name: _____( )

Class: Primary 5 _____

20

Total Time for Booklets A and B: 50 minutes

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 calculator is **NOT** allowed.

Booklet B :

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.   What is the number that lies midway between 167 and 201?

Ans: _____

17.   What is the sum of 151 thousands, 61 tens and 71 ones?

Ans: _____

18. Find the missing number in the box below.

$(12 + 11 \times \boxed{?} \div 12 = 12$

Ans: _____

19. Find the value of the following.

$456 \div 8 + (113 - 4) \times 7$

Ans: _____

20. Jessie bought $\frac{5}{8}$ kg of sugar. She poured them equally into 15 containers.

What is the mass of sugar in each container?

Ans: _____ kg

21. A book shop sold a total of 12 000 pens from May to August.
It sold 2 400 pens in August. Express the number of pens sold in August as a fraction of the total number of pens sold from May to August.

Ans: _____

22. The base of a triangle is 42 cm and its height is 38 cm.

What is the area of the triangle?

Ans: _____ cm^2

23. What is the missing number in the box below?
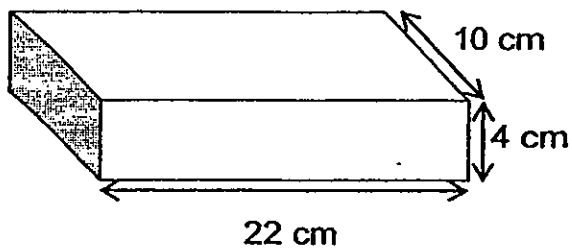
$$4 : 9 = \boxed{?} : 54$$

Ans: _____

24. Ali and Bob have $96 altogether. The ratio of the amount of money that Ali has to the ratio of the amount of money that Bob has is 9 : 7.

How much money does Ali have?

Ans: $ _____

25. What is the volume of the box below?

10 cm

4 cm

22 cm

Ans: _____ cm^3

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. A sum of $857 is shared among three sisters.
   The eldest sister gets $250 more than the second sister.
   The second sister gets $125 more than the youngest sister.
   How much money does the youngest sister get?

Ans: $ _____

27. When a 2-digit number is divided by 9, it has a remainder of 7.
   When it is divided by 7, it has a remainder of 5.
   Find the 2-digit number.

Ans: _____

28. The figure below is made up of 2 identical right-angled triangles and a rectangle. The length of the rectangle is twice the length of its breadth.
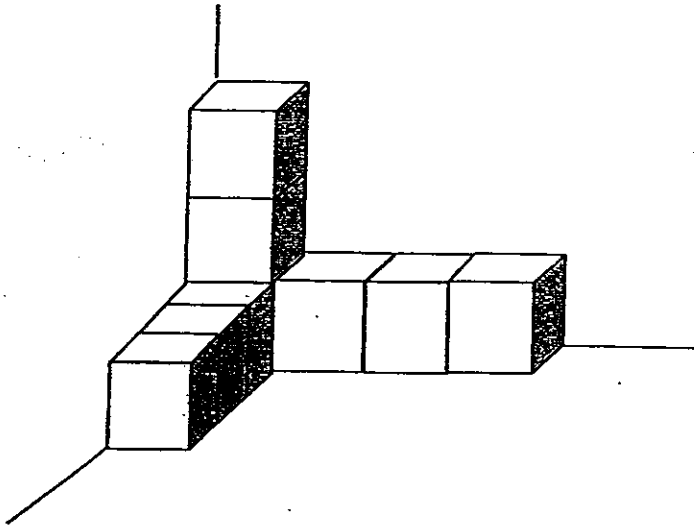
Find the area of the whole figure.

12 cm

10 cm
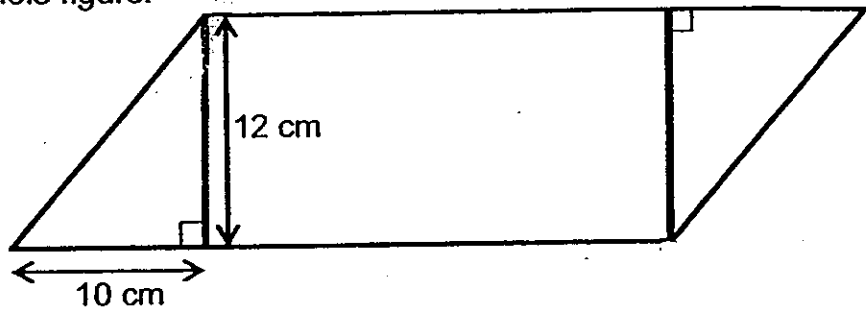
Ans: _____ cm²

29. Esther baked some cookies. After selling $\frac{5}{9}$ of the cookies, she had 136 cookies left. How many cookies did Esther bake in all?

Answer: _____

30. The solid below is made up of 3-cm cubes. What is the volume of the solid?
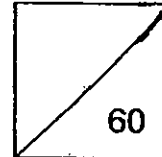

Answer: _____ cm³

End of Paper 1

HENRY PARK PRIMARY SCHOOL
2013 SEMESTRAL EXAMINATION 1
MATHEMATICS

PRIMARY 5

PAPER 2

Name: _____ (.)

Class: Primary 5 _____

60

Time for Paper 2: 1 h 4 min

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.

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

1. Susan had 146 muffins. Lucy had 98 muffins. Susan gave some muffins to Lucy so that both of them had an equal number of muffins. How many muffins did Susan give Lucy?

Answer: _____

2. Elaine's monthly salary was $4 200. She received $1\frac{1}{4}$ month of her salary as bonus in December. How much in total did Elaine receive for her salary and bonus in December?

Answer: $ _____

3. A container with a square base of side 13 cm has a height of 20 cm.

It is $\frac{2}{5}$ filled with water. Find the volume of water in the container.

20 cm

13 cm

13 cm
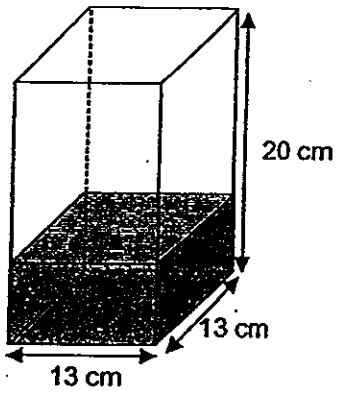
Answer: _____ cm³

4. David spent $\frac{5}{9}$ of his money on a box of biscuits.

He spent $\frac{3}{4}$ of the remaining money on some sweets. He had $9 left.

How much money did David have at first?

Answer : _____

5. Wayne is 4 years older than Jake. Jake is 6 years older than Peter.
   The ratio of Wayne's age to Peter's age is 7 : 2. What is Jake's age?

Answer :_____years old

For questions 6 to 18, show your working clearly in the space provided for each question 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)

6. 186 muffins were packed into big and small boxes. There were 7 more small boxes than big boxes. Each big box contained 12 muffins and each small box contained 6 muffins. How many big boxes were used?

Answer: _____ [3]

7. In a bookshelf, $\frac{4}{5}$ of the books are fiction books. $\frac{1}{3}$ of the remainder are non-fiction books. The remaining books are magazines. There are 800 more fiction books than magazines. Find the number of magazines in the bookshelf?

Answer: _____ [3]

8. Bernice spent $195 on 3 dresses and 3 bags.

   Each bag cost $\frac{2}{3}$ as much as each dress.

   How much did Bernice spend on the 3 dresses?

   Answer: _____ [3]

9. 63 stickers were distributed completely among 5 boys and 2 girls.

   Each girl received twice as many stickers as each boy.
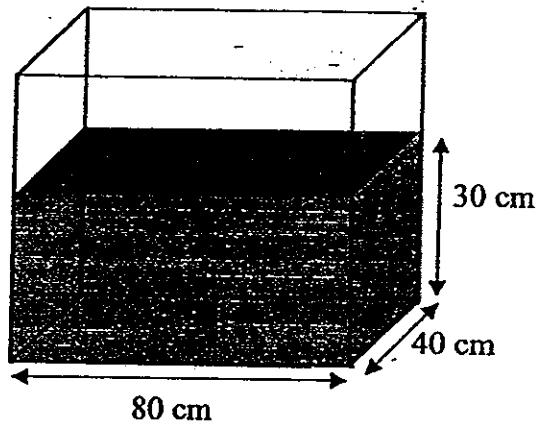
   How many stickers did each girl receive?

   Answer: _____ [3]

10. The tank containing some water has a capacity of 160 litres.

It is filled with water to a height of 30 cm.

How much water must be poured away so that the tank will be half-filled?

30 cm

40 cm

80 cm

Answer: _____ [3]

11. Ali, Bob and Caden shared 2 040 trading cards among themselves. Ali received $\frac{1}{4}$ as many trading cards as Bob. Caden received thrice as many trading cards as Bob. How many trading cards did Caden receive?

Answer: _____ [4]

12. In the figure below, ACDF shows a rectangular piece of paper of breadth 70 cm. Its length is twice its breadth. Jeannie coloured 4 identical triangles grey on the paper as seen in the figure. Given that points P, Q, R, S, T and U are mid-points of AB, BC, CD, DE, EF and FA, find the area of the piece of paper which was **not** coloured grey.

A   P   B   Q   C

U   R   70 cm

F   T   E   S   D
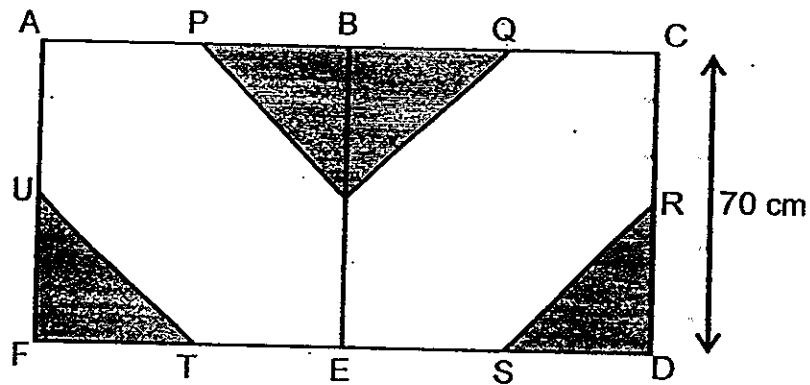
Answer: _____ [4]

13. A science quiz consisted of 25 multiple-choice questions. 4 marks were awarded for every correct answer but 1 mark was deducted for every wrong answer. Joseph answered all the questions and was awarded 70 marks. How many questions did he answer wrongly?

Answer: _____ [4]

14. A total of 589 red, yellow and blue buttons were placed in a container.
The ratio of the number of red buttons to the number of yellow buttons was 3 : 1.
There were 29 more blue buttons than red buttons in the container.
How many red buttons were there in the container?

Answer: _____ [4]

15. There were 85 fewer black marbles than white marbles in a box.

    After $\dfrac{1}{4}$ of the black marbles and $\dfrac{3}{7}$ of white marbles were taken out,

    there was an equal number of black and white marbles in the box.

    What is the total number of marbles in the box at first?

    Answer: _____[5]

16. A rectangular tank was half filled with water as shown in Figure 1.

Some water was poured out from the tank into an empty pail and the height of the water level became 14 cm as shown in Figure 2.

a) How many litres of water was poured out of the tank into the empty pail?

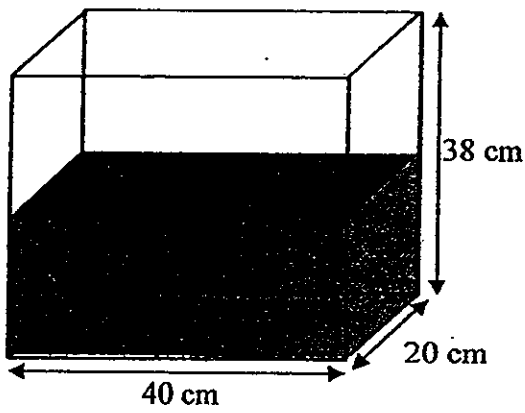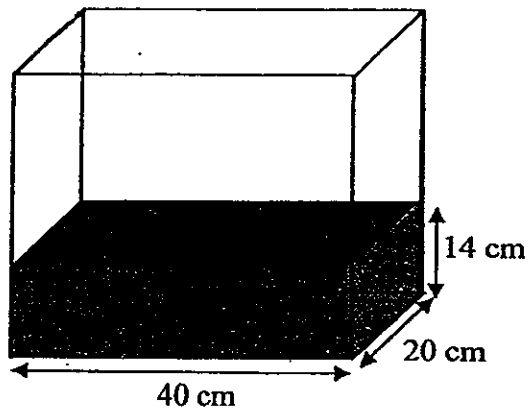b) How many litres of water was needed to fill up the tank completely after some water had been poured out?

38 cm

20 cm

40 cm

Figure 1

14 cm

20 cm

40 cm

Figure 2

(a) _____[2]

(b) _____[3]

17. Kelly baked some cookies. She packed $\frac{3}{10}$ of the cookies for sale and the remaining cookies were given to Tom and Jane in the ratio 5 : 2.

    a) Given that Tom received 273 more cookies than Jane, how many cookies did Kelly bake?

   b) Kelly sold the cookies in packs of 7 for $5. How much money did Kelly receive from the sale of all the cookies?

Answer: a)_____[3]

b) _____[2]

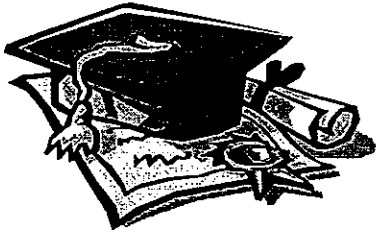18. The long staircase at a tourist attraction has 300 steps.

Gerald climbed up the staircase 2 steps at a time while his father climbed up the staircase 3 steps at a time. How many steps on the long staircase were **not** stepped on at all by either Gerald or his father?
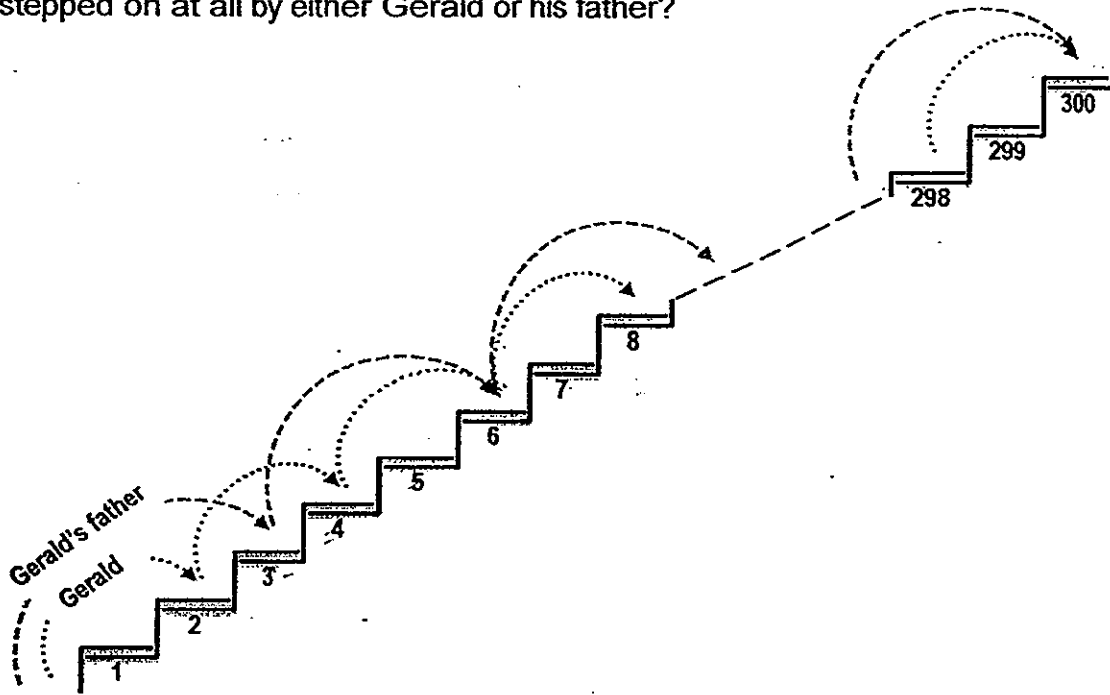
Answer: _____ [4]

End of Paper 2

ANSWER SHEET

EXAM PAPER 2013
SCHOOL : HENRY PARK PRIMARY SCHOOL
SUBJECT : PRIMARY 5 MATHEMATICS

TERM : SA1

ORDER CALL : MR GAN @ 9299 8971 . 86065443

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

Section B
Q16) 184
Q17) 151681
Q18) 12
Q19) 820
Q20) 1/24kg
Q21) 1/5
Q22) 798cm^2
Q23) 24
Q24) $54
Q25) 880cm^2
Q26) $119
Q27) 61
Q28) 408cm^2
Q29) 306
Q30) 243cm^2

Paper 2
Q1) 146 − 98 = 48
    48 ÷ 2 = 24 muffins

Q2) $4200 \div 4 = 1050$
$1050 + 4200 + 4200 = \$9450$

Q3) $20/5 \times 2 = 8$
$13 \times 13 \times 8 = 1352cm^3$

Q4) $1u \rightarrow 9$
$9u \rightarrow 9 \times 9 = \$81$

Q5) $14 - 6 - 4 = 4$
$4 + 6 = 10$ years old

Q6)

Small boxes	No of muffins	Big boxes	No of muffins	Total	Check
22	$22 \times 6 = 132$	$22 - 7 = 15$	$15 \times 12 = 180$	312	X
15	$15 \times 6 = 90$	$15 - 7 = 8$	$8 \times 12 = 96$	186	√

Q7) $2/3 \times 1/5 = 2/15$
$4/5 \times 3/3 = 12/15$
$12/15 - 2/15 = 10/15$
$10u \rightarrow 800$
$1u \rightarrow 80$
$2u \rightarrow 80 \times 2 = 160$ magazines (Ans)

Q8) $3 \times 3 = 9$
$2 \times 3 = 6$
$6 + 9 = 15$
$1u \rightarrow 195 \div 15 = 13$
$9u \rightarrow 13 \times 9 = \$117$ (Ans)

Q9) $5u + 4u = 9u$
$1u \rightarrow 63 \div 9 = 7$
$2u \rightarrow 7 \times 2 = 14$ (Ans)

Q10) $16L \rightarrow 160,000cm^3$
$160000 \div 2 = 80000cm^3$
$30 \times 40 \times 80 = 96000cm^3$
$96000 - 80000 = 16000cm^3$ (Ans)

Q11) 12u + 4u + 1u = 17u
    1u → 2040 ÷ 17 = 120
    12u → 120 x 12 = 1440 (Ans)

Q12) 70 x 2 = 140
    140 x 70 = 9800cm^2
    70 ÷ 2 = 35
    1/2 x 35 x 35 = 612.5cm^2
    612.5 x 4 = 2450
    9800 − 2450 = 7350cm^2 (Ans)

Q13) 25 x 4 = 100
    100 − 70 = 30
    4 + 1 = 5
    30 ÷ 5 = 6 (Ans)

Q14) 589 − 29 = 560
    1u → 560 ÷ 7 = 80
    3u → 80 x 3 = 240 (Ans)

Q15) 1 − 1/4 = 3/4
    1 − 3/7 = 4/7
    4/7w = 3/4b
    12/21w = 12/16b
    5u → 85
    1u → 85 ÷ 5 = 17
    16u + 21u = 37u
    37u → 37 x 17 = 629 (Ans)

Q16) a) 38 ÷ 2 = 19
        19 x 20 x 40 = 15200
        14 x 20 x 40 = 11200
        15200 − 11200 = 4000ml = 4L (Ans)
    b) 38 − 14 = 24
        24 x 20 x 40 = 19200ml = 19.2L (Ans)

Q17) a) 1 − 3/10 = 7/10
        5u − 2u = 3u = 273
        1u → 273 ÷ 3 = 91
        91 x 10 = 910 (Ans)

b) 91 x 3 = 273
273/7 x 5 = 195 (Ans)

Q18) All even numbers stepped on by Gerald
All divisible by three stepped on by Gerald's father
So only odd numbers not divisible by three not stepped on eg, 1, 5, 7,...
Thus every three steps will not be stepped on

300 ÷ 3 = 100 (Ans)

METHODIST GIRLS' SCHOOL (PRIMARY)

Founded in 1887

CONTINUAL ASSESSMENT 2013
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: 5 March 2013

This booklet consists of 6 printed pages including this page.