CATHOLIC HIGH SCHOOL

MID - YEAR EXAMINATION 2013

MATHEMATICS

PRIMARY 5

PAPER 1

(BOOKLET A)

Name : _____ ( )

Class: Primary 5 _____

Date: 20 May 2013

15 questions

20 marks

Total Time for Booklets A and B: 50 min

Booklet A : **Page 1 to 5**

INSTRUCTIONS TO CANDIDATES

Do not open this booklet until you are told to do so.

Follow all instructions carefully.

Shade your answers in the Optical Answer Sheet (OAS) provided.

You are **not** allowed to use a calculator.

Answer all questions.

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.
All diagrams are not drawn to scale. (20 marks)

---

1. What is the place value of the digit 9 in 3 798 000?

   (1) tens

   (2) hundreds

   (3) thousands

   (4) ten thousands

---

2. 60 thousands + 6 thousands + 6 ones = _____.

   (1) 60 606

   (2) 66 006

   (3) 606 006

   (4) 606 606

---

3. Which one of the following numbers has the value of 756 000 when rounded off to the nearest thousand?

   (1) 755 268

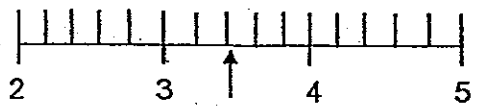
   (2) 756 268

   (3) 756 628

   (4) 756 826

(Go on to the next page)

4. The diagram shows part of a scale.



Which one of the following is closest to the reading indicated by the arrow?

(1) 3.2

(2) 3.3

(3) 3.4

(4) 3.6

---

5. Which one of the following has the same value as $7\frac{1}{4}$?

(1) 7.14

(2) 7.15

(3) 7.25

(4) 7.41

---

6. Eddy had $1\frac{3}{5}$ m of rope. He used $\frac{1}{3}$ m of the rope. How much rope was left?

(1) $1\frac{4}{15}$ m

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

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

(4) $1\frac{14}{15}$ m

(Go on to the next page)

7. $\frac{2}{5}$ of a class were boys and the rest were girls. Find the ratio of the number of boys to the number of girls in the class.

(1) 2 : 3

(2) 2 : 5

(3) 3 : 2

(4) 3 : 5

---

8. $\frac{3}{9} + \frac{1}{9} = \frac{1}{9} \times \boxed{?}$

(1) 1

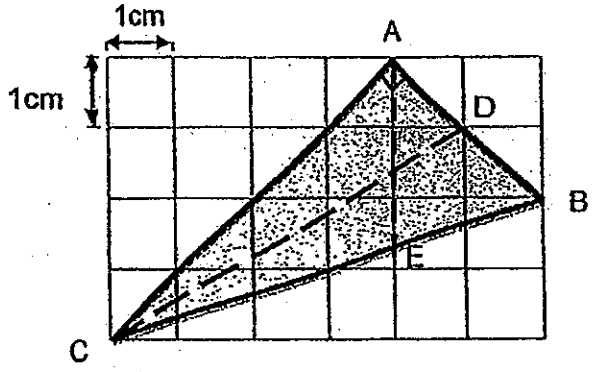
(2) 2

(3) 3

(4) 4

---

9. Given that the base of triangle ABC is side AB, identify its height.



(1) AE

(2) BC

(3) AC

(4) CD

(Go on to the next page)

10. Find the product of $\frac{3}{8}$ and $\frac{2}{9}$.

(1) $\frac{1}{12}$

(2) $\frac{5}{17}$

(3) $1\frac{11}{16}$

(4) $\frac{43}{72}$

---

11. Mary has thrice as many stamps as Betty and twice as many stamps as Sam. What is the ratio of the number of stamps Sam has to the total number of stamps Mary and Betty has?

(1) 3 : 8

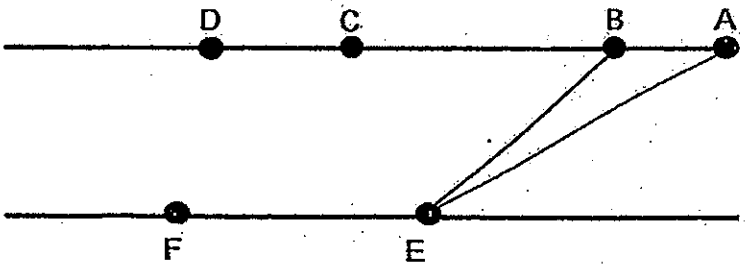
(2) 3 : 11

(3) 8 : 3

(4) 11 : 3

---

12. Which 3 of the following points, A, B, C, D, E and F would form another triangle of the same area as triangle ABE?



(1) Triangle ABF

(2) Triangle BCE

(3) Triangle CDE

(4) Triangle CDF

(Go on to the next page)

13. A rope was cut into two pieces in the ratio 3 :10.
The shorter piece was 6 m long. Jack and Shawn shared the longer piece in the ratio 2 : 3. What was the length of the rope that Jack received?

(1) 20 m

(2) 12 m

(3) 8 m

(4) 4 m

---

14. $\frac{2}{3}$ of the area of a square is the same as $\frac{1}{2}$ of the area of a circle.
Express the area of the square as a fraction of the area of the circle.

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

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

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

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

---

15. Joshua mixed some syrup with water to make orange juice. The ratio of the amount of syrup used to the amount of water used was 2 :3.
He used 8 ℓ of syrup. How many litres of the orange juice did Joshua prepare?

(1) 20 ℓ

(2) 12 ℓ

(3) 8 ℓ

(4) 4 ℓ

End of Booklet A

(Go on to Booklet B)

CATHOLIC HIGH SCHOOL

MID - YEAR EXAMINATION 2013

MATHEMATICS

PRIMARY 5

PAPER 1

(BOOKLET B)

Name :_____ ( )

Class: Primary 5 _____

Date: 20 May 2013

Booklet A	20
Booklet B	20
Total	40

15 questions

20 marks

Total Time for Booklets A and B: 50 min

Booklet B : **Page 6 to 12**

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Show your working clearly as marks are awarded for correct working.

Write your answers in this booklet.

You are **not** allowed to use a calculator.

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.
All figures are not drawn to scale.

Do not write in this space.

(10 marks)

16. Write the following in figures.

Two million, six hundred thousand and forty-nine

Ans: _____

17. Express 6.75 as a mixed number in the simplest form.

Ans: _____

18. Find the missing number in the box.

10 : 2 = ? : 3

Ans: _____

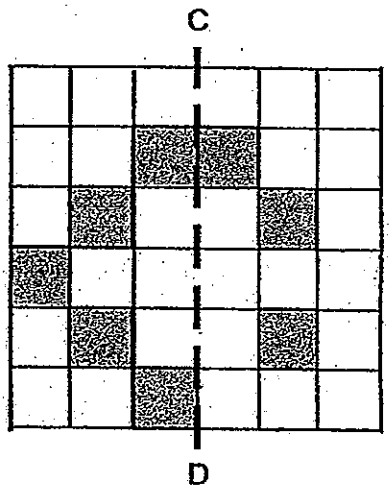
(Go on to the next page)

19. Find the value of $48 \div (8 - 2) + 3 \times 9$.

Do not write in this space.

Ans: _____

20. Shade two more squares in the following figure such that the line CD is the line of symmetry.



21. There were 11 girls and 15 boys at a party. What fraction of the children at the party were boys?

Ans: _____

(Go on to the next page)

22. Using all the digits **5, 3, 0, 8,** form the smallest possible four digit odd number. Each digit can only be used once.

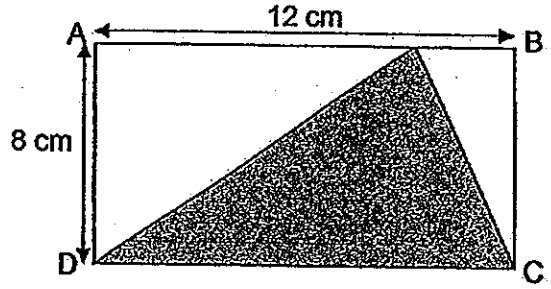
Do not write in this space.

Ans: _____

23. The population of Town X, when rounded off to the nearest thousand, was 13000. What could be the largest possible number of the population of Town X?

Ans: _____

24. Rectangle ABCD measures 12 cm by 8 cm. Find the area of the shaded triangle.



Ans: _____ cm^2

(Go on to the next page)

25. Dylan jumped a distance of $1\frac{3}{4}$ m in a competition. Gabriel's jump was twice as far as Dylan. How far did Gabriel jump? Express your answer as a mixed number in the simplest form.

Do not write in this space.

Ans: _____ m

(Go on to the next page)

Total marks for questions 16 to 25

SCORE (Q16-25):

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. Express your answer in simplest form.

Do not write in this space.

(10 marks)

26. Express $\frac{5}{9}$ as a decimal, correct to 2 decimal places.

Ans: _____

27. Ben and Sam shared a pizza. Ben ate $\frac{1}{3}$ of the pizza and gave $\frac{1}{4}$ of the remainder to Sam. What fraction of the pizza was left? Express your answer in the simplest form.

Ans: _____

(Go on to the next page)

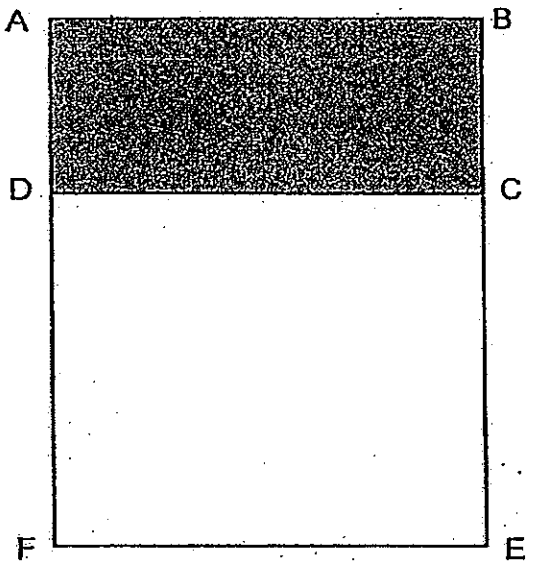
28. Zachary has more marbles than Samuel. The ratio of the sum of their marbles to the difference in the number of their marbles is 11 : 3. Find the ratio of Zachary's number of marbles to Samuel's number of marbles.

Do not write in this space.

Ans: _____

29. Rectangle ABCD has an area 18 m^2.

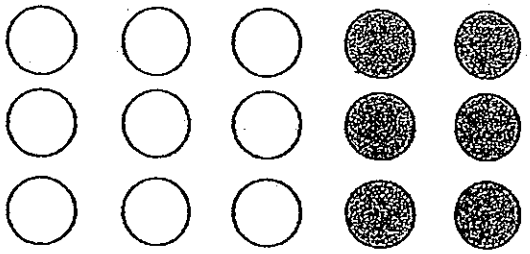
If AD is $\frac{1}{3}$ of AF, find the area of rectangle ABEF.



Ans: _____ m^2

(Go on to the next page)

30. How many more circles must be shaded so that the ratio of the number of unshaded circles to the total number of circles is 1 : 3 ?



Do not write in this space

Ans: _____

End of Paper 1

Total marks for questions 26 to 30

SCORE (Q26-30):

CATHOLIC HIGH SCHOOL

MID - YEAR EXAMINATION 2013

MATHEMATICS

PRIMARY 5

PAPER 2

Name :_____( )

Class: Primary 5_____

Date: 20 May 2013

Duration: 1 h 40 min

Parent's Signature:_____

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

There are 13 pages in this booklet.

INSTRUCTIONS TO CANDIDATES

Do not turn over this page until you are told to do so.

Follow all instructions carefully.

Show your working clearly as marks are awarded for correct working.

Write your answers in this booklet.

You are allowed to use a calculator.

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

Do not write in this space.

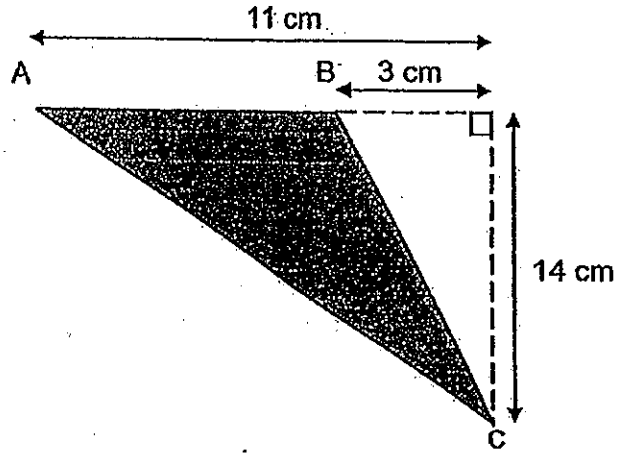
(10 marks)

1. Ernest bought 53 kg of rice. He packed the rice equally into 5 bags. What is the mass of each bag of rice?

   Round off your answer to the nearest whole number.

Ans: _____ kg

2. Find the area of the shaded triangle ABC.



Ans: _____ cm^2

(Go on to the next page)

3. Sam had $\frac{3}{4}\ell$ of water. He poured the water into cups of $\frac{1}{8}\ell$ each. How many cups could he fill?

Do not write in this space.

Ans: _____

4. Ray took $1\frac{1}{2}$ h to finish a marathon. Ivan's timing was $\frac{3}{4}$ of Ray's timing.
How long did Ivan take to finish the marathon?
Express your answer as a mixed number in the simplest form.

Ans: _____ h

(Go on to the next page)

5. Leslie has 240 stamps. He has $\frac{3}{4}$ as many stamps as Steven. How many stamps do they have altogether?

Do not write in this space.

Ans: _____

(Go on to the next page)

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)

Do not write in this space.

6. Peggy has twice as many erasers as John. Debbie has thrice as many erasers as Peggy. Debbie has 40 erasers more than John. How many erasers do the 3 children have altogether?

Ans: _____ [3]

7. In a bag, there were some black and white stickers in the ratio 4 : 7. After 42 white stickers were removed from the bag, the ratio of the number of black stickers to the number of white stickers became 16 : 7. Find the number of white stickers in the bag at first.

Ans: _____ [3]

(Go on to the next page)

8. Joshua and Nicolas had 50 and 90 cards respectively. After each of them gave away an equal number of cards, Nicolas had thrice as many cards as Joshua. How many cards did they give away altogether?

Do not write in this space.

Ans: _____ [3]

9. 1 file and 1 notebook cost $10. 1 file and 1pen cost $6. Each notebook costs thrice as much as a pen. How much does 1file cost?

Ans: _____ [3]

(Go on to the next page)

10. The table below shows the price of roses on a normal day and on Valentine's Day.

Do not write in this space.

	Normal Day	Valentine's Day
Roses (per stalk)	$1.20	$2.80

Mary bought roses on a normal day and on Valentine's Day.

a) How much more does Mary need to pay for 1 dozen stalks of roses on Valentine's Day than on a normal day?

b) Mary has $50 and she decides to spend it all on roses, what is the maximum number of stalks of roses that she can buy on a normal day?

Ans: a) _____ [2]

b) _____ [1]

11. Henry and Ryan had the same number of marbles at first. After Henry gave away 12 marbles and Ryan gave away 36 marbles, Henry had 4 times as many marbles as Ryan. How many marbles did Ryan have at first?

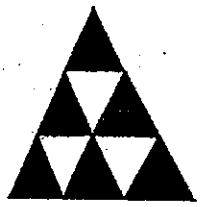
Ans: _____ [3]

(Go on to the next page)

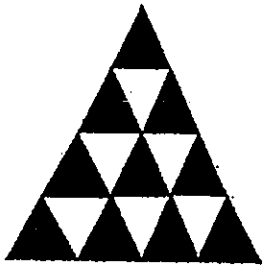
12. Black and white triangles are used to form a sequence of patterns. The first three patterns are shown below.

Do not write in this space.

Pattern 1



Pattern 2



Pattern 3

Pattern Number	Number of black triangles	Number of white triangles	Total number of triangles
1	3	1	4
2	6	3	9
3	10	6	16

a) Find the number of white triangles in Pattern 4.
b) Find the number of black triangles in Pattern 4.
c) In which pattern number will there be a total of 144 triangles?

Ans: a) _____ [1]

Ans: b) _____ [1]

Ans: c) _____ [2]

(Go to the next page)

13. The cost of a birthday present was shared between Benjamin and Christopher. At first, Benjamin paid $\frac{2}{3}$ of what Christopher paid. When Benjamin paid $50 more, he ended up paying $\frac{4}{5}$ of what Christopher paid. How much was the cost of the present?

Do not write in this space.

Ans: _____ [4]

(Go on to the next page)

14. Shaun spent \$360 of his pocket money on a bicycle, $\frac{2}{3}$ of the remainder on food, and saved the rest. Given that he saved $\frac{1}{5}$ of his pocket money, how much was his pocket money?

Do not write in this space.

Ans: _____ [4]

(Go on to the next page)

15. Sarah packed some chocolates in bags of 8 and some sweets in bags of 4. She sold each bag of chocolates at $2 and each bag of sweets at $5.50. She sold 8 times as many bags of sweets as chocolates and collected a total of $3128 from the sale of sweets and chocolates. How many sweets and chocolates did she sell in all?

Do not write in this space.

Ans: _____ [5]

(Go on to the next page)

16. Alex, Ben and Caleb had some stamps. Alex had 90 stamps more than Ben, and Ben had 10 stamps more than Caleb. After Alex had given Ben 95 of his stamps and Caleb bought some stamps, Alex and Caleb had the same number of stamps while Ben had thrice as much as either of them.

a) How many stamps did Caleb at first?
b) How many stamps did they have altogether at first?

Do not write in this space.

Ans: a) _____ [3]

Ans: b) _____ [2]

(Go on to the next page)

17. Mr Lee had a sum of money. On Monday, he spent $\frac{1}{5}$ of his money and then lost a $2 note. On Tuesday, he spent $\frac{1}{3}$ of his remaining money on 3 identical bags of rice. On Wednesday, he bought another 4 such bags of rice. He had $21.60 left in the end. Find the sum of money he had at first.

Do not write in this space.

Ans: _____ [5]

(Go on to the next page)

18. At a carnival, the ratio of the number of males to the number of females was 6 : 5. There were twice as many girls as women. There were $\frac{1}{2}$ as many boys as men. There were 80 more girls than boys.

a) How many people were there at the carnival?

b) After some time, 90 men left the carnival. How many women must join the carnival so that there is an equal number of men and women in the end?

Do not write in this space.

Ans: a) _____ [3]

Ans: b) _____ [2]

End of Paper 2

ANSWER SHEET

EXAM PAPER 2013

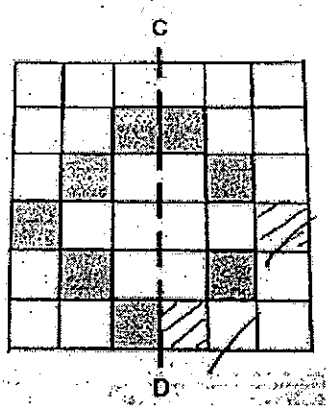
SCHOOL : CATHOLIC HIGH PRIMARY SCHOOL
LEVEL : PRIMARY 5
SUBJECT : MATHEMATICS
TERM : SA1

Booklet A

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

16. 2600049

17. $6\frac{3}{4}$
18. 15
19. 35
20.
21. 15/26
22. 3085
23. 13499
24. 48
25. $3\frac{1}{2}$
26. 0.56
27. ½
28. 7:4
29. 54
30. 4



Paper 2

1. **53÷5=10.6**
   10.6 round off to 11kg

2. 11-3=8
½ x 8 x14 =56

3. ¾ = 6/8
6/8 ÷ 1/8 = 6

4.

$1\frac{1}{2} = 1\frac{2}{4}$

$1\frac{2}{4} \div 4 = \frac{3}{8}$

$\frac{3}{8} \times 3 = 1\frac{1}{8}$

5. 240÷3=80
80x4=320
320+240=560

6. 40÷5=8
8x9=72

7. B:W
4:7
14:28

28-7=21
21u---42
1u---2
28u----56

8. 2u --- 40
1u---20
50-20=30
30x2=60

9. 1F + 1N = 10
1F+ 1P = 6
1N -1P = 4
2u --- 4
1u --- 2

1P --- 2
6-2=4

10. A. 1.20x12=14.40
2.8x12=33.6
33.6-14.4=19.20

B. 60÷1.20=46.667
She can buy 46 roses

11. 36-12=24
24÷3=8
8+36=44

12. A. 10
B. 15
C. T --- 144
12x12=144
12-1=11

13. 2u --- 50
1u --- 25
45u --- 1125

14. 360÷2=180
180x5=900

15. 3128÷46=68
68x8x4=2176
68x1x8=544
2176+544=2720

16. A. 2u --- 90+5+5=100
1u --- 50
50-5=45

B. 5u --- 250
250-5=245

17. 21.60÷2=10.80
10.80x9=97.20
97.20+2=99.20
99.20÷4=24.80
24.80x5=124

18. A. M : F
6 : 5
18 : 15

B:M	G:W
6:12	10:5

10u-6u = 4u
4u --- 80
1u ---20
33u --- 660

B. Man : 12x20=2240
Women : 5x20=100
240-90=150
150-100=50