Name:_____( ) 21 May 2010

Class: P 5_____

CATHOLIC HIGH SCHOOL

PRIMARY FIVE

MID-YEAR EXAMINATION

MATHEMATICS

PAPER 1

(BOOKLET A)

15 questions

20 marks

Total Time for Booklets A and B: 50 min

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 on the Optical Answer Sheet. All diagrams are not drawn to scale. (20 marks)

---

1. In 1 240 973, which digit is in the ten thousands place?

   (1) 1
   (2) 2
   (3) 0
   (4) 4

---

2. Which of the following numbers is the smallest?

   (1) 8.79
   (2) 8.97
   (3) 8.709
   (4) 8.907

---

3. 30 ÷ 1000 = _____.

   (1) 0.3
   (2) 0.03
   (3) 0.003
   (4) 0.0003

---

4. What is the sum of 7 hundreds, 5 tenths and 4 thousandths?

   (1) 750.004
   (2) 700.450
   (3) 700.504
   (4) 700.054

(Go on to the next page)

5 Which of the following fractions is smaller than $\frac{1}{4}$?

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

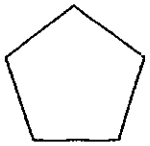
(2) $\frac{2}{7}$

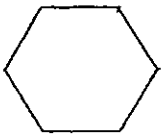
(3) $\frac{3}{10}$

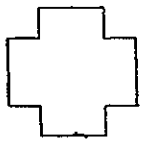
(4) $\frac{4}{17}$

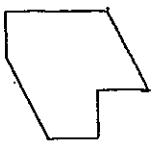
---

6 Which of the shapes **cannot** tessellate?

(1) 

(2) 

(3) 

(4) 

(Go on to the next page)

7. Elsie had **only** the following coins with her.

She used three of the coins to pay for a pen without receiving any change. Which of the following could **not** be the cost of the pen?

(1) 35 cents

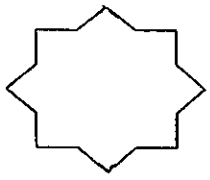
(2) 80 cents

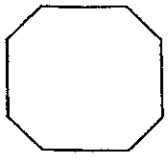
(3) $1.40

(4) $1.55

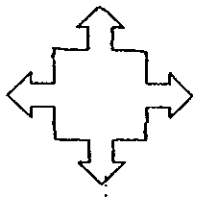
---

8. Which of the following figures **does not** have any lines of symmetry?

(1) 

(2) 

(3) 

(4) 

(Go on to the next page)

9. The mass of box A is 12 kg. The total mass of box B and box C is also 12 kg. What is the average mass of the 3 boxes?

(1) 12 kg
(2) 8 kg
(3) 6 kg
(4) 4 kg

---

10. There were 80 children and 320 adults at a concert. What fraction of the people were children?

(1) $\frac{1}{5}$
(2) $\frac{1}{4}$
(3) $\frac{3}{4}$
(4) $\frac{4}{5}$

---

11. If Wei Yang had a blue T-shirt, a yellow T-shirt and a green T-shirt, 1 pair of black shorts and 1 pair of white shorts, how many different outfits could he wear?

(1) 9
(2) 6
(3) 3
(4) 5

(Go on to the next page)

12. Mrs Tan baked some pies. $\frac{3}{5}$ of them were apple pies and the rest were berry pies. She gave away all of the apple pies and $\frac{1}{4}$ of the berry pies. What fraction of the pies were given away?

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

(2) $\frac{7}{10}$

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

(4) $\frac{17}{20}$

---

13. The chairs in a classroom are arranged in straight rows. John is seated in the second row from the front and the fifth row from the back. He is also seated third from the left end of a row and fourth from the right. How many chairs are there in the classroom?

(1) 24

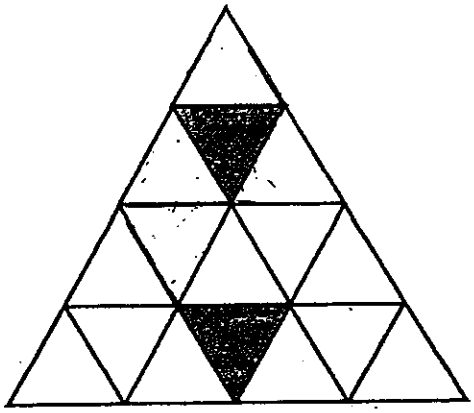
(2) 36

(3) 42

(4) 49

(Go on to the next page)

14. In the figure below, 2 triangles are shaded. How many **more** of such triangles need to be shaded so that $\frac{3}{8}$ of the figure is shaded?



(1) 1

(2) 5

(3) 6

(4) 4

---

15. A machine takes 60 seconds to cut an iron rod into 6 equal parts. At this rate, how long will it take the machine to cut the rod into 9 equal parts?

(1) 72 s

(2) 80 s

(3) 90 s

(4) 96 s

(Go on to Booklet B)

Name: _____ ( ) 21 May 2010

Class: P 5_____

CATHOLIC HIGH SCHOOL

PRIMARY FIVE

MID-YEAR EXAMINATION

MATHEMATICS

PAPER 1

(BOOKLET B)

15 questions

20 marks

Total Time for Booklets A and B: 50 min

INSTRUCTIONS TO CANDIDATES

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

Follow all instructions carefully.

Answer all questions.

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 space provided. For questions which require units, give your answers in the units stated. (10 marks)

Do not write in this space

16. The number of spectators at a stadium when rounded off to the nearest hundred was 20 000. What was the biggest possible number of spectators at the stadium?

Ans: _____

17. Express 50 cents as a fraction of $20. (Give your answer in its simplest form.)

Ans: _____

18. Find the value of $\frac{4}{9} \times \frac{3}{10}$. (Give your answer in its simplest form.)

Ans: _____

19. What is the value of $24 + 6 \times 2 \div (8 - 4)$?

Ans: _____

(Go on to the next page)

20. Express $\frac{6}{7}$ as a decimal correct to 2 decimal places.

Do not write in this space

Ans: _____

21. In 68 x 89 = 68 x ? - 68 x 1, what is the missing number in the box?

Ans: _____

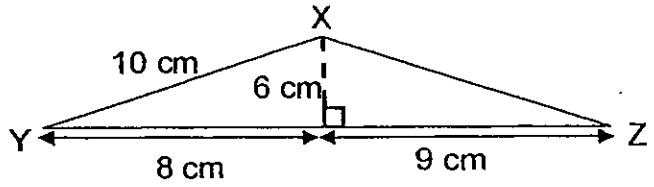
22. Find the value of $\frac{7}{8} + \frac{5}{12}$. Express your answer as a mixed number.

Ans: _____

(Go on to the next page)

Do not write in this space

23. What is the area of triangle XYZ as shown below?

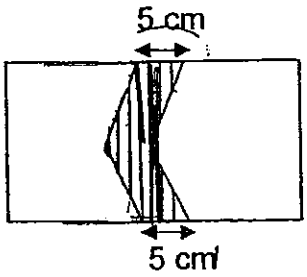


Ans: _____ cm^2

24. There are 36 pupils in a class. 15 of them are boys. What is the ratio of the number of girls to the number of boys in the class? (Give your answer in its simplest form.)

Ans: _____

25. The rectangle shown below measures 25 cm by 18 cm.
Find the area of the **shaded** part of the rectangle.



Ans: _____ cm^2

Total marks for questions 16 to 25

(Go on to the next page)

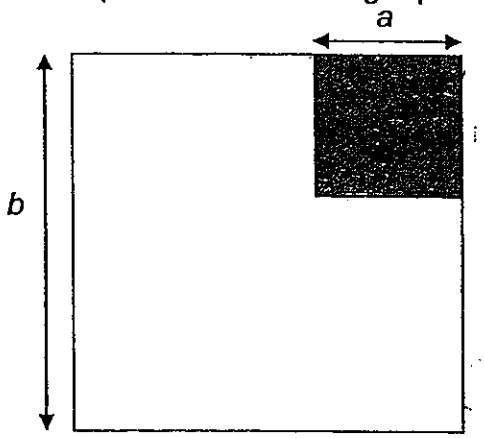
Questions **26** to **30** carry 2 marks each. Show your working clearly in the space below each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.
(10 marks)

Do not write in this space

26. Kim's bag weighs 5.8 kg. Gina's bag is 970 g heavier than Kim's. What is the total weight of Kim's bag and Gina's bag in kg?

Ans: _____ kg

27. The figure below is made up of 2 squares. The ratio of *a* to *b* is 2:5. If the perimeter of the big square is 40 cm, what is the length of *a*?



Ans: _____ cm

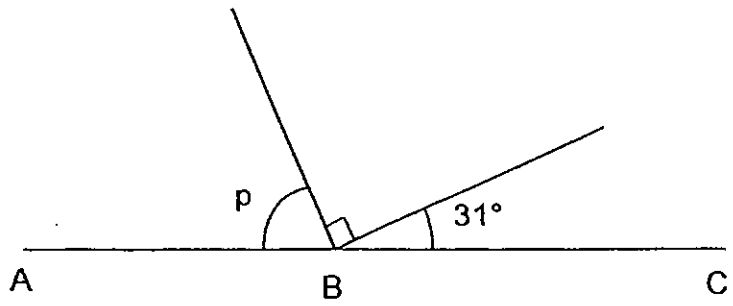
28. Beef is sold at $1.50 per 100 g in a market. What is the price of 2.7 kg of beef?

Ans: $_____

(Go on to the next page)

29. In the diagram below, ABC is a straight line. Find ∠p.

Do not write in this space



Ans: _____ °

30. I am thinking of two numbers. The sum of the two numbers is 146 and their difference is 32. What is the bigger number?

Ans: _____

End of Paper 1

Name:_____( ) 21 May 2010

Class : P 5_____

CATHOLIC HIGH SCHOOL

PRIMARY FIVE

MID-YEAR EXAMINATION

MATHEMATICS

PAPER 2

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

Total Time: 1 h 40 min

Parent's Signature: _____

INSTRUCTIONS TO CANDIDATES

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

Follow all instructions carefully.

Answer all questions.

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.
(10 marks)

Do not write in this space

1. Terry bought a chair and a stool. The chair cost thrice as much as the stool. If the chair cost $39, how much did he spend altogether?

Ans: $_____

2. Gilbert had $350 at first. After giving some money to his three brothers, he had $185 left. What was the average amount of money each of his brothers receive?

Ans: $_____

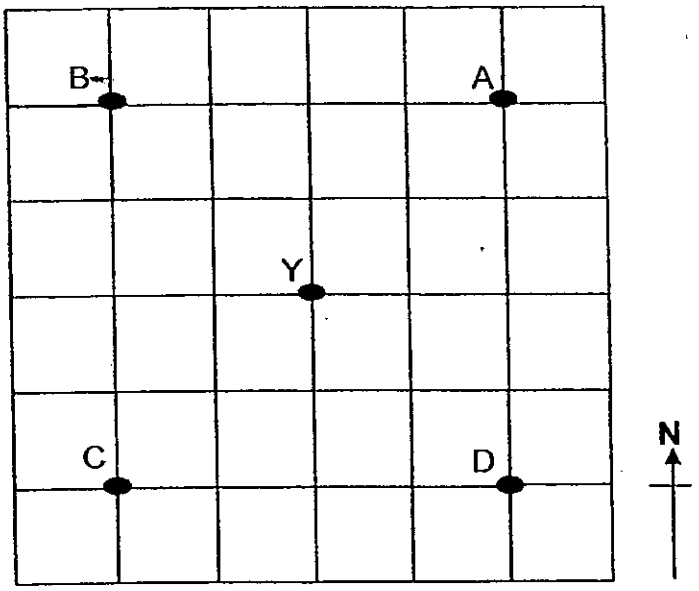
3. There are some sweets in a tin. The sweets can be put into bags of 6 and 9 with no sweets leftover. When the sweets are put into bags of 11, there are 6 sweets leftover. What is the smallest possible number of sweets in the tin?

Ans: _____

(Go on to the next page)

4. Refer to the square grid below to answer the question.

Do not write in this space



John is at Y, facing north-west. If he faces that point and makes a 270° clockwise turn, at which point would he be facing then?

Ans:_____

5. A zoo has several ostriches and giraffes. They have 20 pairs of eyes and 66 legs. How many ostriches and how many giraffes are there in the zoo?

Ans: _____ostriches

_____giraffes

(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. Use the information below to answer questions (a) and (b).
The table below shows the number of computers per flat in a housing estate.

Number of computers per flat	0	1	2	3
Number of flats	7	24	44	38

a) How many flats have at least 2 computers?

b) Find the average number of computers per flat.

Ans: a) _____[1]

b) _____[2]

(Go on to the next page)

7. Mervin had 38 stickers more than Shawn. After Shawn had given Mervin 24 of his stickers, Mervin had thrice as many as Shawn. How many stickers did Mervin have at first?

Do not write in this space

Ans: _____ [3]

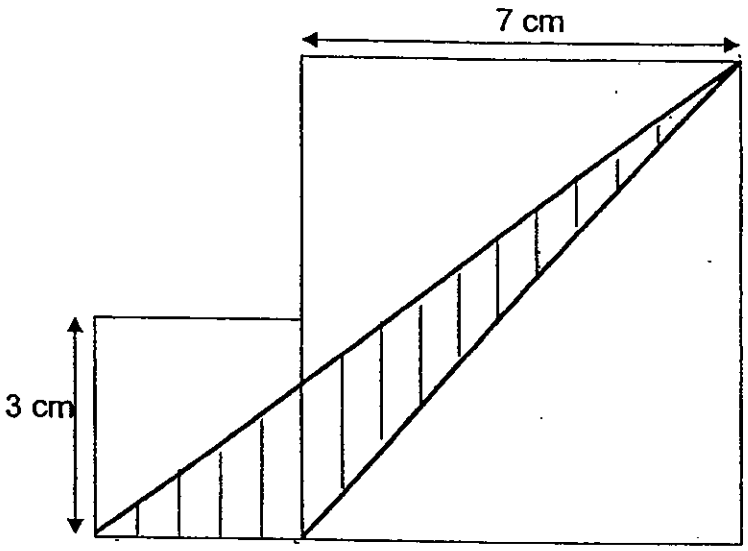
8. Mrs Tan is 42 years old. Her son is 3 years old. In how many years' time will she be 4 times as old as her son?

Ans: _____ [3]

(Go on to the next page)

9. * In the figure, the shaded triangle is formed within 2 squares. Find the area of the **unshaded** parts of the figure.

Do not write in this space



Ans: _____ [3]

(Go on to the next page)

10. In a bag, there were 56 coins consisting of 20-cent and 50-cent coins. Given that the total sum of money was $19 and that there were 4 more 20-cent coins than 50-cent coins in the bag, how many 20-cent coins were there?

Do not write in this space

Ans: _____ [3]

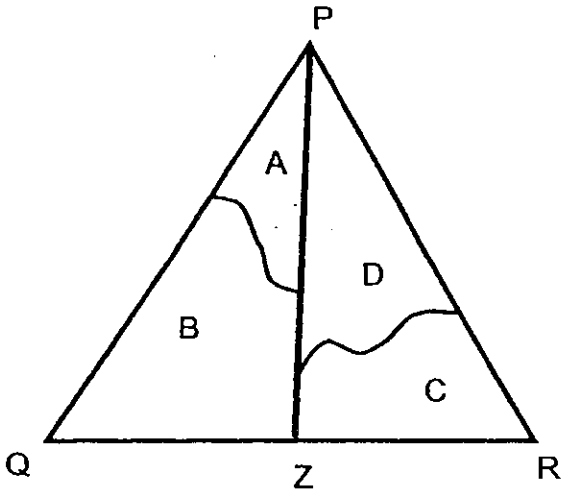
11. 3 pails A, B and C each contained a certain amount of water. After $\frac{1}{8}$ of the water in A and $\frac{1}{3}$ of the water in C was poured into B, the 3 pails each had 14.7 litres of water. How much water was there in B at first?

Ans: _____ [4]

(Go on to the next page)

12. The figure below shows the triangle PQR that is divided into 4 parts A, B, C and D.

Do not write in this space



The line PZ divides the triangle into 2 equal parts. The ratio of Area A to Area B is 1:3 and the ratio of Area B to Area C is 5:2. Area D is 210 cm^2. What is the area of triangle PQR?

Ans : _____ [4]

(Go on to the next page)

13. Alvin and Fred had the same amount of money at first. After Alvin had spent $23 and Fred had spent $98, Alvin had six times as much money as Fred. With their remaining money, together they went to buy food for some needy children. If a pack of food cost $3, how many packs of food did they buy?

Do not write in this space

Ans : _____ [4]

(Go on to the next page)

14. Kim, Lisa and Mandy shared the total cost of a present. Kim paid $\frac{3}{8}$ of the cost of the present. The remaining cost of the present was shared between Lisa and Mandy in the ratio 7:8. Given that Kim paid $38 more than Lisa, what was the amount of money Mandy ~~pay~~ paid?

Do not write in this space

Ans: _____ [4]

(Go on to the next page)

15. Isaac was reading a book. On the first day, the number of pages he read was $\frac{2}{5}$ of the number of pages unread. On the second day, he read another 24 pages of the book. As a result, the number of pages he read was $\frac{5}{9}$ of the number of pages unread. If he had to complete reading the book in another 4 days, what was the average number of pages he had to read a day for the rest of the book?

Do not write in this space

Ans: _____ [4]

(Go on to the next page)

16. At a children's carnival, $\frac{3}{16}$ of the people were adults and the rest were children. $\frac{9}{13}$ of the children were boys. After 104 boys left the carnival, there were $\frac{5}{8}$ as many boys as girls. How many people were there at first?

Do not write in this space

Ans: _____ [5]

(Go on to the next page)

17. In a game, the number of points Mr Tan had to the number of points Mr Lim had was 7:4. After Mr Tan lost 85 points and Mr Lim gained 85 points, the ratio of points Mr Tan had to that of Mr Lim became 1:3.

a) How many points did Mr Tan have at first?

b) How many more points did Mr Lim have than Mr Tan at the end?

Do not write in this space

Ans: a) _____ [3]

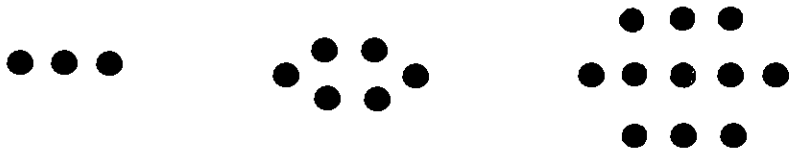
b) _____ [2]

(Go on to the next page)

18.

Do not write in this space

Figure 1 Figure 2 Figure 3



Study the pattern in the above figures and answer questions a, b and c.

a) Complete the table below. [2]

Figure Number	1	2	3	4	5
Number of dots	3	6	11		

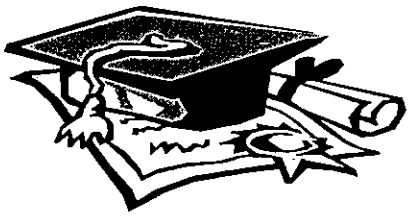
b) How many dots are there in the Figure 10?

c) In which figure can 843 dots be found?

Ans: b) _____ [1]

c) _____ [2]

End of Paper 2

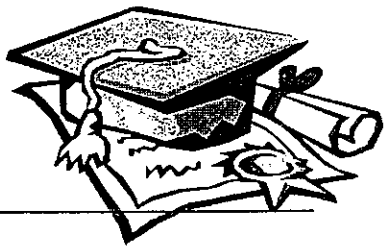


ANSWER SHEET

EXAM PAPER 2010

SCHOOL : CATHOLIC HIGH PRIMARY
SUBJECT : PRIMARY 5 MATHEMATICS

TERM : SA1



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

16)20049 **17)1/40** **18)2/15** **19)27** **20)0.86**

21)90 **22)$1\frac{7}{24}$** **23)51cm²** **24)7:5** **25)90cm²**

26)12.570kg **27)4cm** **28)$40.50** **29)59°** **30)89**

Paper 2

1)3units→$39 1unit→$39÷ 3 = $13 Amount he spent altogether →$13 x 4 = $52	2)Gave to brother→$350 - $185 = $165 Average amount→$165 ÷ 3 = $55
3)72	4)C
5) 7 ostriches 13 giraffes	6)a)44 + 38 = 82 b)computer→24 + 88 + 114 = 226 flats→24 + 44 + 38 + 7 = 113 average number→226 ÷ 113 = 2
7)2units→38 + 24 + 24 = 86 1unit→86÷ 2 = 43 Number of stickers Mervin had first →43 x 3 = 129 129 – 24 = 105 stickers	8)10 years' time
9)Total area→7cm x 7cm = 49cm² →3 cm x 3cm = 9cm² →49cm² + 9cm² = 58cm²	Area of shaded triangle→(½ x b x h)cm² →(½ x 3 x 7)cm² →10.5cm² Area of unshaded→58cm² – 10.5cm² = 47.5cm²

10)30 20-cent coins	11)5.25L
12)600cm2	13)5units→$98 - $23 = $75 1unit→$75÷ 5 = $15 Left→$15 x 7 = $105 Packs of food bought→$105 ÷ $3 = 35 food packs
14)2units→$38 1unit→$38÷ 2 = $19 Amount of money Mandy paid →$19 x 8 = $152	15)5u – 4u = 1u 1unit→24 Pages Unread→24 x 9 = 216 Average→216 ÷ 4 = 54 pages
16)18u – 5u = 13u 13units→104 1unit→104 ÷ 13 = 8 Number people→32 x 8 = 256	17)a)140 b)110
18)a)18, 27 b)10 x 10 + 2 = 102 dots c)figure 29	