Name : _____ (

Class : Pr. 5 (   )

3 November 2004

CATHOLIC HIGH SCHOOL

END-OF-YEAR EXAMINATION

PRIMARY FIVE

MATHEMATICS
EM1/ EM2

BOOKLET A

15 questions

25 marks

Total Time For Booklets A and B : 2 h 15 min

INSTRUCTIONS TO CANDIDATES

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

Follow all instructions carefully.

Answer all questions.

Questions 1 to 5 carry 1 mark each. Questions 6 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.**

(25 marks)

1. Which one of the following has the digit 2 in the hundred thousands place?

   (1)   2 455 605

   (2)   4 677 201

   (3)   6 132 450

   (4)   8 213 370

2. What is the quotient when 124 is divided by 22?

   (1)   5

   (2)   8

   (3)   14

   (4)   110

3. $\frac{4}{7} \div 9$ is the same as _____.

   (1) $\frac{4}{7} \times 9$

   (2) $\frac{4}{7} \times \frac{1}{9}$

   (3) $\frac{7}{4} \times 9$

   (4) $\frac{7}{4} \times \frac{1}{9}$

4. Find the sum of 1.56, 4.046 and 2.68 .

    (1)   4.47

    (2)   · 7.17

    (3)   8.286

    (4)   8.7

5. Express 7 km 2 m in kilometres.

    (1)   7.2 km

    (2)   7.02 km

    (3)   7.002 km

    (4)   7.0002 km

6. The number of eggs carried in a lorry was 18 000 when rounded off to the nearest thousand. Which one of the following could be the actual number of eggs?

    (1)   17 459

    (2)   17 603

    (3)   18 521

    (4)   18 968

7. The length of 3 poles are $\frac{5}{8}$ m, $\frac{3}{4}$ m and $1\frac{1}{2}$ m. The total length of the poles is _____ m.

    (1) $1\frac{3}{8}$

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

    (3) $1\frac{9}{14}$

    (4) $2\frac{7}{8}$

2

8. Which one of the following has the largest value?

   (1) 2.2

   (2) 2.41

   (3) 2.102

   (4) 2.368

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9. If $A : B = 2 : 3$ and $B : C = 4 : 5$, what is $A : C$?
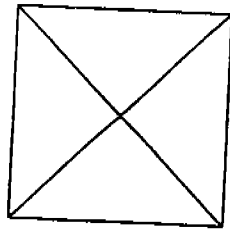
   (1) 2 : 5

   (2) 5 : 9

   (3) 3 : 10

   (4) 8 : 15

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10. $\frac{1}{10}$ of the marbles in a box are red. 0.35 of them are blue and the rest are green. How many percent of the marbles in the box are green?

   (1) 45%

   (2) 55%

   (3) 64%

   (4) 65%

3

11. The following square (not drawn to scale) has an area of 36 cm². It is divided into 4 identical triangles. What is the height and base of each triangle?

(1) 2 cm and 9 cm

(2) 3 cm and 6 cm

(3) 4.5 cm and 9 cm

(4) 6 cm and 6 cm

12. Which of the following figures can tessellate?

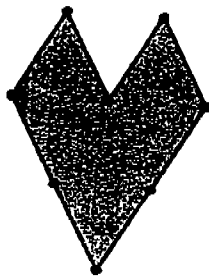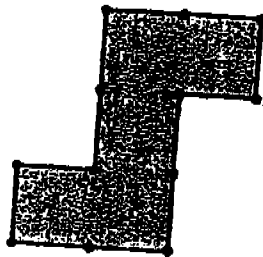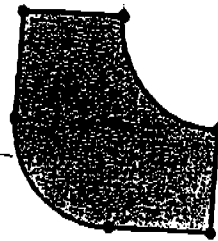Figure A   Figure B   Figure C

(1) B only

(2) A and B only

(3) B and C only

(4) All of the above

4

13. What is the maximum number of 4-cm solid cubes that can be fitted into a cuboid measuring 24 cm by 12 cm by 10 cm?

    (1)   36

    (2)   45

    (3)   180

    (4)   720

---

14. The average of 5 numbers is 65. When a 6th number is added, the new average becomes 60. What is the 6th number?

    (1)   5

    (2)   25

    (3)   30

    (4)   35

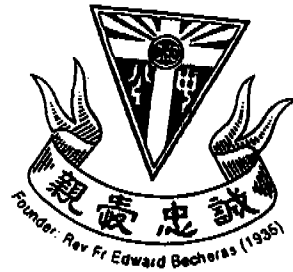15. The figure below is not drawn to scale. Find the length of BC.
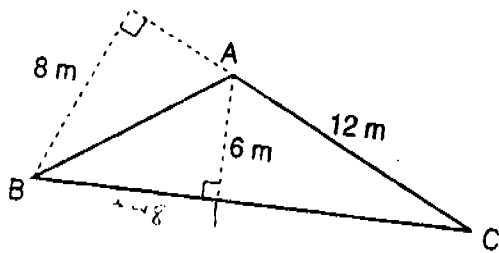
    (1)   8 m

    (2)   9 m

    (3)   16 m

    (4)   36 m

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————(.)

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CATHOLIC HIGH SCHOOL

END-OF-YEAR EXAMINATION

PRIMARY FIVE

MATHEMATICS
EM1/ EM2

BOOKLET B

35 questions

75 marks

Total Time For Booklets A and B : 2 h 15 min

INSTRUCTIONS TO CANDIDATES

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

Follow all instructions carefully.

Answer all questions.

Marks obtained for Booklet A	
Marks obtained for Booklet B	25
Total Marks	75
	100

Questions 16 to 35 carry 1 mark each. Write your answers in the space provided.
Give your answers in the units stated.

(20 marks)

16.   Find 56 × 87.

Answer: _____

17.   What is the remainder of 918 ÷ 46?

Answer: _____

18.   Find $3\frac{1}{3} - 1\frac{5}{12}$. (Leave your answer as a fraction in its lowest term.)

Answer: _____

SCORE

6

19. Arrange the following in ascending order.

$\frac{7}{4}$, 1.3 , $\frac{5}{6}$, 75%

Answer: _____,_____,_____,_____

20. A chef had 2.7 kg of butter. He used 150 g to make a sandwich and another 1.5 kg to bake a cake. How many kilograms of butter did he have left?
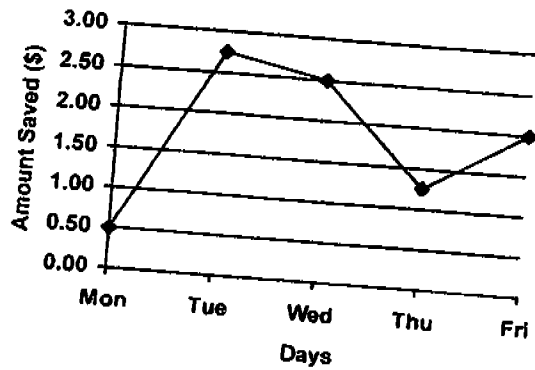
Answer: _____ kg

21. Find the length of a cube which has a volume of 512 cm³.

Answer: _____ cm

SCORE

The line graph below shows Jennifer's daily savings over 5 days. Use the graph to answer questions 22 and 23.

22. What was the average amount of money Jennifer saved each day over the past 5 days?

Answer: $ _____

23. If Jennifer's pocket money is $5 every day, how much did she spend altogether over the past 5 days?

Answer: $ _____

24. The average weight of 5 boys is 34.5 kg. The weight of the first 4 boys are 28 kg, 25 kg, 40.2 kg and 38.6 kg respectively. Find the weight of the 5th boy.

Answer: _____ kg

SCORE

8

25. A machine can bind 26 books in 5 minutes. How many books can it bind in 2 hours at the same rate?

Answer: _____

26. Find the height of a triangle with a base of 16 cm and an area of 56 cm².

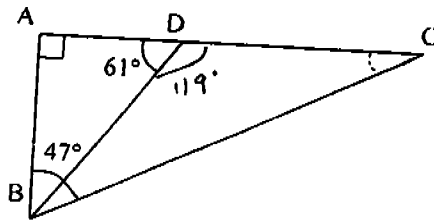Answer: _____ cm

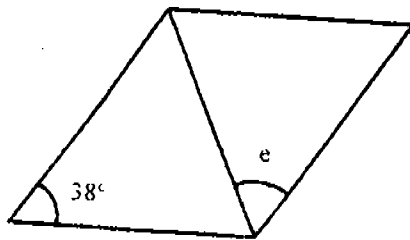27. You are facing East. After turning 135° anti-clockwise, which direction will you be facing?

Answer: __

SCORE

9

28. In the following figure (not drawn to scale), ABC is a right-angled triangle. Given that $\angle ABC = 47°$ and $\angle ADB = 61°$, find the value of $\angle DBC$.

A   D   C

61°

119°

47°

B

Answer: _____ °

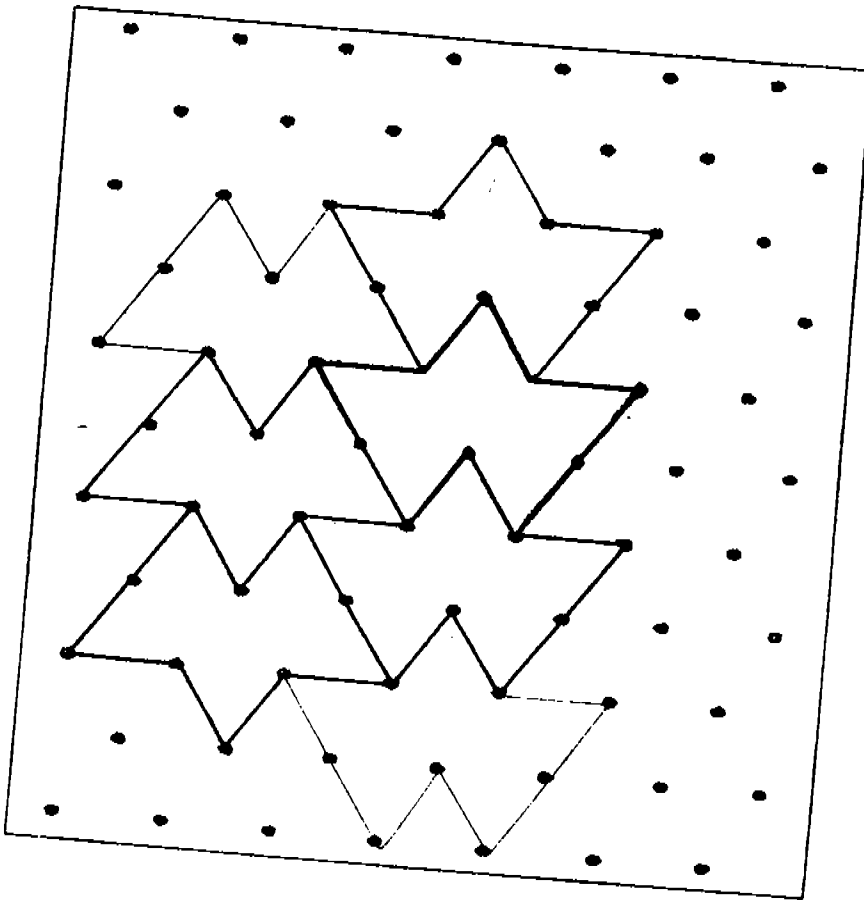29. The following rhombus is not drawn to scale. Find $\angle e$.

e

38°

Answer: _____

SCORE

10

30. The pattern in the box shows part of a tessellation. Extend the tessellation by drawing **two** more unit shapes in the space provided within the box.

SCORE

11

31. Mary signed up for the following handphone package. It cost $20 per month for 100 minutes of free talktime. If her handphone usage last month was 259 minutes, how much did she have to pay?

Handphone Package	First 100 mins	Free talktime (for $20 per month)
	Next 100 mins	10 cents per min
	Above 200 mins	25 cents per min

Answer: $ _____

32. The weight of 3 parcels are in the ratio 5 : 3 : 9. If the heaviest parcel weighs 32.4 kg. find the difference in weight between the 2 lighter parcels.

Answer: _____ kg

SCORE

12

33. Peter and Kasim were reading a book each. The books they were reading had 300 pages each. Kasim read 16 pages more than Peter. If they had read a total of 234 pages, how many more pages must Kasim read to finish his book?

Answer:

34. A rectangular area has a length of 63 m. If 1l of paint can be used to paint 27 m² and a total of 28 l of paint was used to paint the rectagular area, what is the width of the area?

Answer: _____ m

35. Tom, Jerry and Sally share a sum of money. Tom's share is $\frac{3}{8}$ of the sum of money. Jerry's share is $\frac{1}{3}$ of what Tom and Sally receive. What fraction of the sum of money is Sally's share?

Answer: _____

SCORE

13

For questions 36 to 50, show your working clearly in the space below 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.

(55 marks)

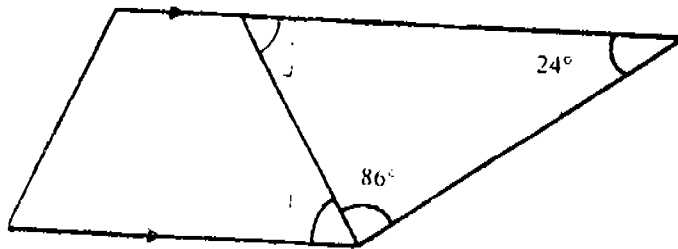36. The table below shows the price of some books sold at a book fair.

Type of books	Price ($)
Comics	6
Children's story books	8
Adult's fiction books	12

How much did Samuel spend if he buys 3 comics, 1 children's story book and 5 adult's fiction books?

Answer: _____ [2]

37. The following trapezium is not drawn to scale. Find ∠j.

Answer _____ [2]

SCORE

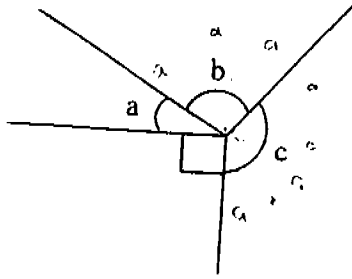38.   In the following figure (not drawn to scale), find the sum of ∠m and ∠q.
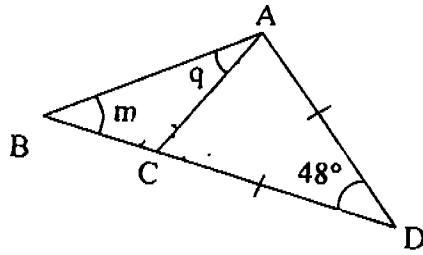
Answer: _____ _____ [2]

39.   Jeremy bought 6 writing pads and a book. He gave the cashier $100 and received a change of $28. If the book cost 3 times as much as a writing pad, how much does the book cost?

Answer: _____ _____ [3]

SCORE

15

40. In the following figure (not drawn to scale), ∠a, ∠b and ∠c are in the ratio 1 : 3 : 5 . Find the difference between the smallest and the largest angle.

Answer: _____ [3]

41. A rectangular tank with a capacity of 6000 cm³ was 20 cm long and 12 cm wide. It contained a stone and some water up to its brim. After the stone was removed, the water level dropped to 20 cm. How much water must be added to fill the tank to its brim after the stone was removed?

Answer: _____ [3]

SCORE

16

42. In the following figure (not drawn to scale), BCEF is a rhombus. AG is parallel to DE and CE = CD. Find ∠CED and ∠BAG.

Answer: _____ [4]

17

529 of 611.
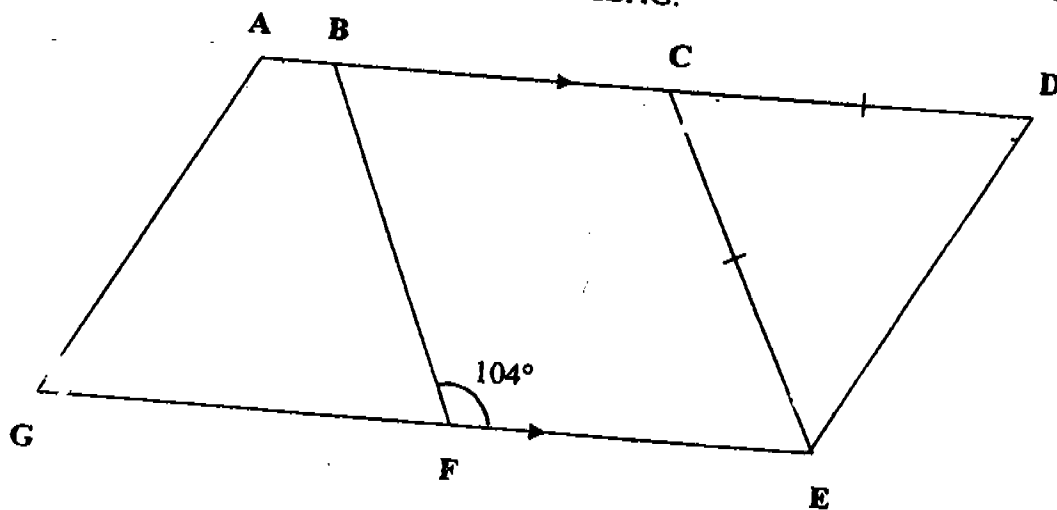
43. Jim and Fatimah shared some sweets at first. Jim had 4 more sweets than Fatimah. After the number of sweets that Jim had was doubled and the number that Fatimah had was tripled, they had 98 sweets altogether. How many sweets did Fatimah have finally?

Answer: _____ [4]

SCORE

18

44. Draw an isosceles triangle whereby ∠LMN = 70° and MN = LN = 8 cm. Measure the length of LM.

M

N

Answer: _____ [4]

SCORE

19

45. Tap A takes 6 hours to fill up a pool measuring 25 m by 21 m by 1.2 m with water. Tap B takes 9 hours to fill up the same pool with water. How long will it take to fill up the same pool with water if both taps are turned on at the same time?

Answer: _____ 4|

SCORE

46. A blouse costs 25% less than a skirt. The usual price of a skirt and 2 such blouses is $60. How much will 2 such skirts and a blouse cost if there is a 20% discount on all three items?

Answer _____ [4]

SCORE

2:

47. A jar which is $\frac{4}{5}$ filled with water weighs $2\frac{7}{8}$ kg. It weighs $2\frac{1}{2}$ kg when it is $\frac{2}{3}$ full. What is the weight of the jar?
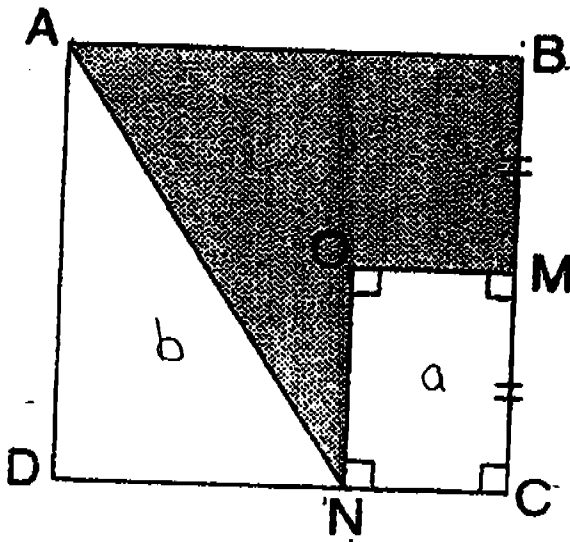
Answers ____ [5]

SCORE

22

48. In the following diagram (not drawn to scale), the perimeter of square ABCD is 120 cm. Given that DN is twice the length of NC and BM is equal in length to MC, find the area of the shaded region.

23

49. A book rental shop charges the following rates shown in the table below :

Duration	Rates
First 2 weeks	$12 per book
Each subsequent day after the first 2 weeks	20¢ per book

A person who borrows 4 books or more will be charged 50¢ less per book for the first 2 weeks for all the books he or she rents. A person who returns his or her books within 2 weeks will get a refund of $4 per book returned. No refund will be given for books returned after 2 weeks. !

What was the total amount Susan had to pay if she had borrowed 5 books and returned 2 books within 2 weeks and the rest of the books 20 days after borrowing?

Answer: _____ [5]

SCORE

24

50. In the following figure (not drawn to scale), the ratio of the area of Square X to the area of Square Y is 1 : 4. If the shaded area forms 25% of Square X, what percentage of the whole figure is not shaded? (Leave your answer as a fraction in its simplest form.)

Square Y

Square X

Answer: _____ _____ [5]

--- END ---

SCORE

SA2

1) 4

2) 1

3) 2

4) 3

5) 3

6) 2

7) 4

8) 2

9) 4

10) 2

11) 2

12) 4

13) 1

14) 4

15) 3

16) 4872

17) 44

18) 1 11/12

19) 75%, 5/6, 1.3, 7/4

20) 1.05

21) 8

22) 1.80

23) 16

24) 40.7

25) 624

26) 7

27) North-West

28) 18

29) 17

30)

31) 44.75

32) 7.2

33) 175 pages

34) 12

35) 3/8

36) $ 86

37) 70°

38) 66°

39) $ 24

40) 120°

41) 1.2 litres

42) Angle CED = 52°

Angle BAG = 128°

43) 54 sweets

44) 8 cm

45) 3 hrs 36 mins

46) $ 52.80

47) 625 g

48) 450 cm^{2}

49) $ 54.60

50) 94 14/19%