

CATHOLIC HIGH SCHOOL
END-OF-YEAR EXAMINATION
PRIMARY FOUR
MATHEMATICS

Name : _____ ()

Class : Primary 4 _____

Date : 2 November

Total time : 1 h 45 min

45 questions

100 marks

Parent's signature : _____

| | |
|--------------------|------------|
| BOOKLET A | 40 |
| BOOKLET B | 40 |
| BOOKLET C | 20 |
| Total Marks | 100 |

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.

This booklet consists of 20 printed pages excluding the cover page.

Section A

Questions 1 to 20 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 oval (1, 2, 3 or 4) on the Optical Answer Sheet. All diagrams are not drawn to scale. (40 marks)

1. The value of the digit 6 in 56 013 is _____.

- (1) 6
- (2) 60
- (3) 600
- (4) 6000

()

2. Which of the following numbers when rounded to the nearest ten becomes 23 900?

- (1) 22 844
- (2) 22 895
- (3) 23 904
- (4) 23 946

()

3. $5\frac{7}{8} = \frac{\boxed{}}{8}$

What is the missing number in the box?

- (1) 33
- (2) 35
- (3) 40
- (4) 47

()

4. In the number 12.34, the digit _____ is in the tenths place.

(1) 1

(2) 2

(3) 3

(4) 4

()

5. Which of the following is a factor of both 18 and 48?

(1) 6

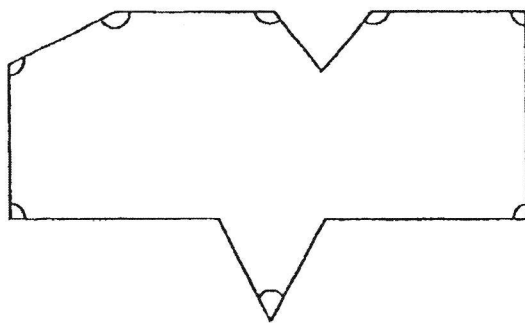
(2) 7

(3) 8

(4) 9

()

6. In the figure, how many of the marked angles are right angles?



(1) 1

(2) 8

(3) 3

(4) 4

()

7. Which of the following numbers is 600 less than 76 891?

- (1) 70 891
- (2) 76 291
- (3) 76 831
- (4) 77 491

()

8. The difference in value between 2 numbers is 480. One of the numbers is 3 times the other number. Find the sum of the 2 numbers.

- (1) 160
- (2) 240
- (3) 640
- (4) 960

()

9. A jug contains 1200 ml of water and a glass contains 710 ml of water. How much water will the jug and 2 such glasses contain?

- (1) 1420 ml
- (2) 1910 ml
- (3) 2400 ml
- (4) 2620 ml

()

10. At a carnival, every 3rd child gets a candy and every 6th child gets a balloon. Which child is the first to get both a candy and a balloon?

- (1) 6th
- (2) 9th
- (3) 12th
- (4) 18th

()

11. All the books in a library were packed into boxes of 8. After packing 112 boxes, there were 6 books unpacked. How many books were there at first?

(1) 890
(2) 896
(3) 902
(4) 904

()

12. Alice bought $\frac{3}{4}$ kg of cookies. Benny bought $\frac{1}{5}$ kg of cookies more than Alice. How many kilograms of cookies did Benny buy?

(1) $\frac{2}{9}$ kg
(2) $\frac{4}{9}$ kg
(3) $\frac{11}{20}$ kg
(4) $\frac{19}{20}$ kg

()

13. Cayden had \$84. He spent $\frac{3}{7}$ of his money on a puzzle. How much money did he have left?

(1) \$12
(2) \$28
(3) \$36
(4) \$48

()

14. Which number is 1.3 less than 4.56?

- (1) 3.26
- (2) 4.43
- (3) 4.69
- (4) 5.86

()

15. Arrange the following decimals in increasing order.

7.012 , 7.1 , 7.02

- (1) 7.1 , 7.02 , 7.012
- (2) 7.1 , 7.012 , 7.02
- (3) 7.02 , 7.012 , 7.1
- (4) 7.012 , 7.02 , 7.1

()

16. 1 pen cost as much as 4 erasers. Danny paid \$8.40 for 1 pen and 3 erasers. Find the cost of 1 eraser.

- (1) \$1.20
- (2) \$2.10
- (3) \$2.40
- (4) \$4.80

()

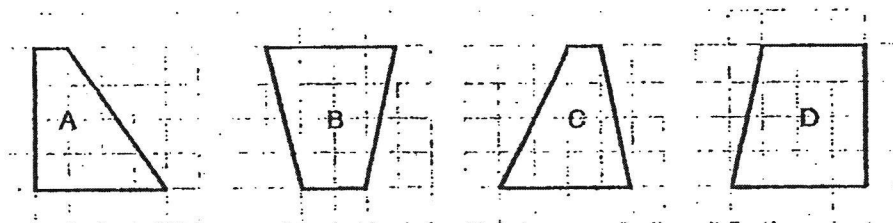
17. In which of the following figures is the dotted line a line of symmetry?



- (1) 5
- (2) 6
- (3) 7
- (4) 8

()

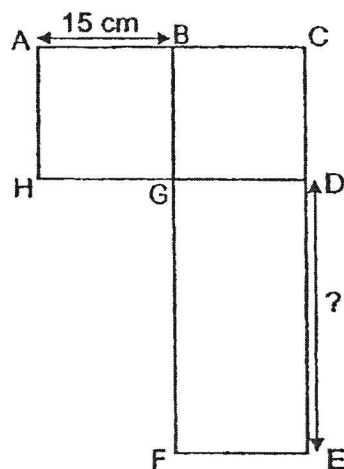
18. Which of the following figures is symmetrical?



- (1) A
(2) B
(3) C
(4) D

()

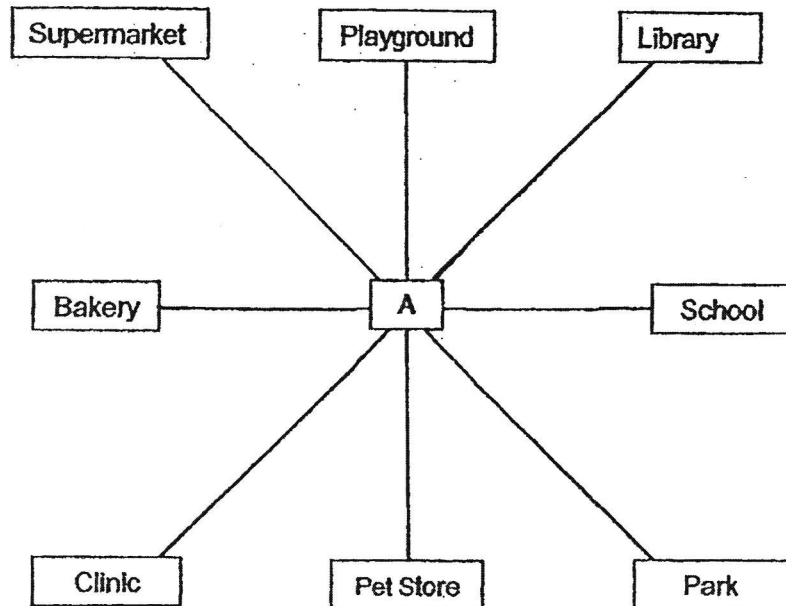
19. In the figure below, square ABGH and square BCDG are identical. The length of rectangle GDEF is thrice its breadth. What is the length of DE?



- (1) 5 cm
(2) 15 cm
(3) 30 cm
(4) 45 cm

()

20. Steve was standing at point A. After turning through an angle of 225° in an anti-clockwise direction, he was facing the library. What was he facing at first?



- (1) Park
- (2) Bakery
- (3) Pet Store
- (4) Supermarket

()

END OF SECTION A

Section B

Questions 21 to 40 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. All diagrams are not drawn to scale. (40 marks)

Do not write
in this space

21. Write twenty-five thousand and thirteen in numerals.

Ans: _____

22. Some factors of 20 are 1, 2, 4 and 20. What are the other two factors of 20?

Ans: _____

23. $\frac{2}{9} + \frac{1}{3} =$ _____

Ans: _____

24. Find the value of $1 - \frac{1}{2} - \frac{1}{8}$.

Do not write
in this space

Ans: _____

25. How many sixths are there in 1 whole?

Ans: _____

26. Express 0.93 as a fraction.

Ans: _____

27. Round 19.52 to the nearest whole number.

Do not write
in this space

Ans: _____

28. Find the value of 17.36×3 .

Ans: _____

29. Measure and write down the size of $\angle a$.



Ans: _____

30. A number has the factors 3 and 7.
The number is between 50 and 70. What is the number?

Do not write
in this space

Ans: _____

31. The fifth multiple of a 1-digit number is 14 more than its third multiple.
What is the 1-digit number?

Ans: _____

32. Lionel has 5 more stickers than Marco. Nathan has 4 times as many
stickers as Marco. Lionel and Nathan has 120 stickers altogether. How
many stickers does Marco have?

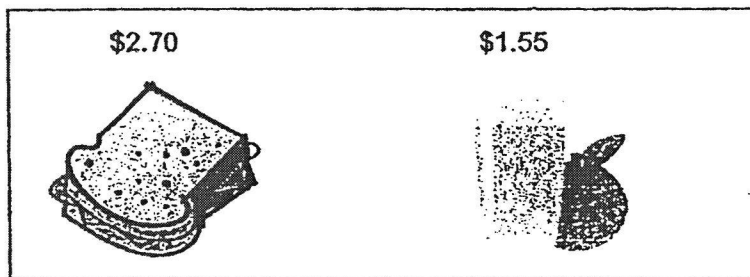
Ans: _____

33. Melissa's monthly salary is thrice the amount she spent in June. Her monthly salary is \$8424. How much did she spend in June?

Do not write
in this space

Ans: \$ _____

34. Study the menu carefully.



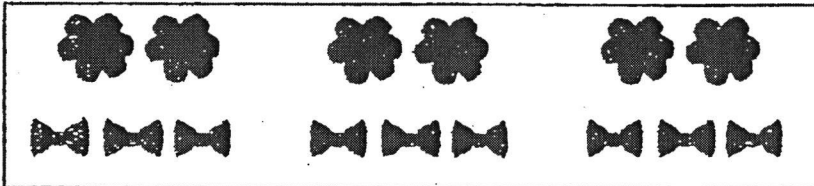
Harry had \$50. He bought 1 chicken sandwich and a fruit juice.

How much money had he left?

Ans: \$ _____

35. Parry used a total of 23.25 m of ribbon to make 6 similar flowers and 9 similar bows. How much ribbon did he use to make 2 such flowers and 3 such bows?

Do not write
in this space



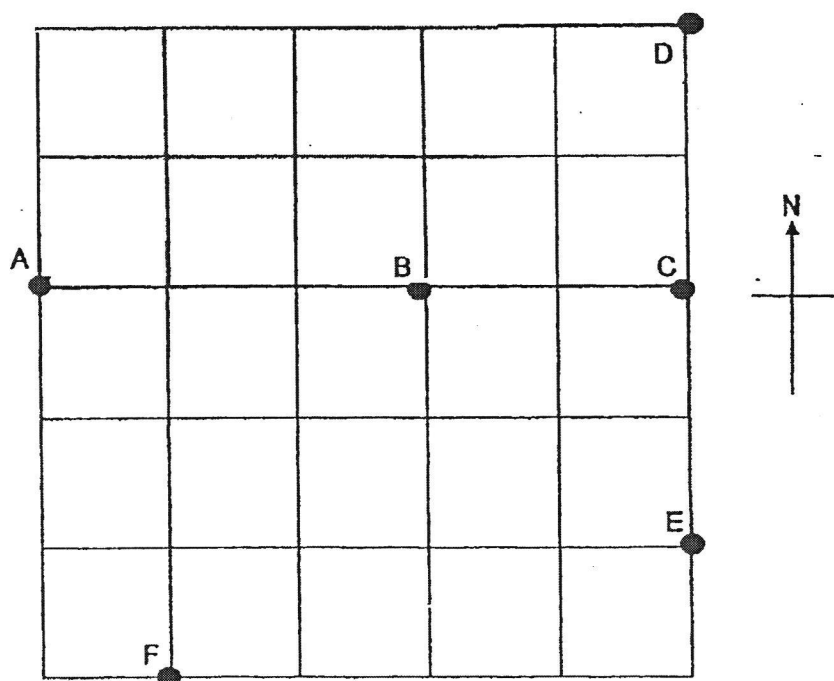
Ans: _____ m

36. Isaac is 7 years old and his sister is 3 years old. In how many years' time will their total age add up to 18?

Ans: _____ years

Look at the square grid below and use the information for question 37 and 38.

Do not write in this space



37. Leo was standing at point B. He walked 1 step to the north, then 3 steps to the west and finally 1 step to the south. Which point did he end up at?

Ans: _____

38. (a) Point _____ is north-east of B.

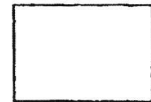
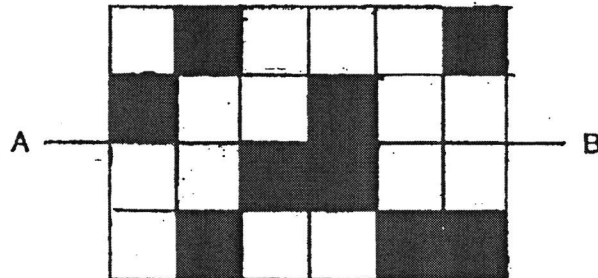
(b) What is the direction of E from C?

Ans: (a) _____

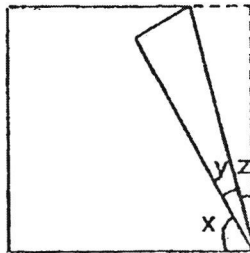
(b) _____

39. The figure below is made up of identical squares. Line AB is the line of symmetry. Shade three more squares so that the figure is symmetrical.

Do not write
in this space



40. Study the figure below. A square piece of paper was folded as shown below.



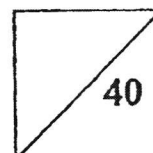
Each statement below is true, false or not possible to tell from the information given. For each statement, put a tick (\checkmark) in the correct column.

| | Statement | True | False | Not possible to tell |
|----|-------------------------------------|------|-------|----------------------|
| a) | $\angle x$ is 45° | | | |
| b) | $\angle y$ is equal to $\angle z$. | | | |



Total marks for question 21 to 40

END OF SECTION B



Section C

For Questions 41 to 45, show your working clearly 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. All diagrams are not drawn to scale.
(20 marks)

Do not write
in this space

41. A t-shirt, a bag and a cap cost \$256. The bag costs \$24 more than the cap. The t-shirt costs the same as the total value of the bag and the cap. How much does the cap cost?

Ans: _____ [4]



42. There were some candies in a bag. Joseph took $\frac{7}{10}$ of the candies and Kenny took the rest. Joseph took 24 more candies than Kenny.

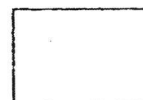
(a) What fraction of the candies did Kenny take?

(b) How many candies were there in the bag at first?

Do not write
in this space

Ans: (a) _____ [1]

(b) _____ [3]



43. 1 watermelon and 4 similar apples weighed 4.05 kg.
1 such watermelon and 1 such apple weighed 3.45 kg.

(a) What was the mass of 1 such apple?

(b) What was the mass of 1 such watermelon?

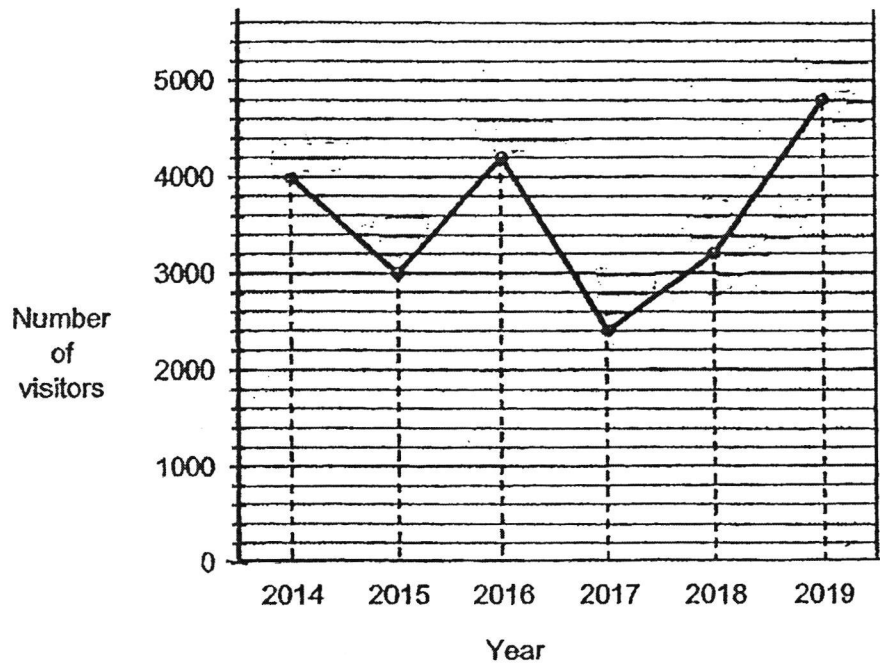
Do not write
in this space

Ans: (a) _____ [2]

(b) _____ [2]

44. The line graph shows the number of people who visited a museum in 6 years.

Do not write
in this space



- (a) What was the increase in the number of people visiting the museum from 2018 to 2019?
- (b) Each ticket to the museum cost \$8.
How much did the museum collect from the sale of the tickets in 2014?

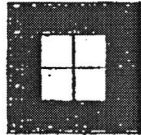
Ans:(a) _____ [2]

(b) _____ [2]

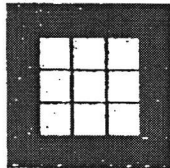
45.

The patterns below are made up of identical shaded and unshaded squares.

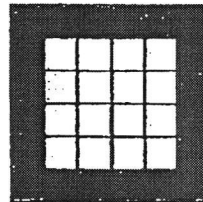
Do not write
in this space



Pattern 1



Pattern 2



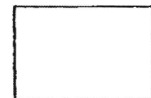
Pattern 3

| Pattern No | Number of shaded squares | Number of unshaded squares | Total number of squares |
|------------|--------------------------|----------------------------|-------------------------|
| 1 | 12 | 4 | 16 |
| 2 | 16 | 9 | 25 |
| 3 | 20 | 16 | 36 |
| 4 | 24 | | |

[2]

- Fill the table for Pattern 4.
- What is the total number of shaded and unshaded squares in Pattern 10?

Ans: _____ [2]



END OF PAPER

ANSWER KEY

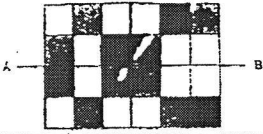
LEVEL : PRIMARY 4
SCHOOL : CATHOLIC HIGH
SUBJECT : MATHEMATICS
TERM : SA2

SECTION A

| | | | | | | | | | |
|-----|---|-----|---|-----|---|-----|---|-----|---|
| Q1 | 4 | Q2 | 3 | Q3 | 4 | Q4 | 3 | Q5 | 1 |
| Q6 | 3 | Q7 | 2 | Q8 | 4 | Q9 | 4 | Q10 | 1 |
| Q11 | 3 | Q12 | 4 | Q13 | 4 | Q14 | 1 | Q15 | 4 |
| Q16 | 1 | Q17 | 4 | Q18 | 2 | Q19 | 4 | Q20 | 2 |

SECTION B

| | |
|-----|--|
| Q21 | 25013 |
| Q22 | 5,10 |
| Q23 | $\frac{2}{9} + \frac{1}{3} = \frac{2}{9} + \frac{3}{9} = \frac{5}{9}$ |
| Q24 | $\frac{1}{2} + \frac{1}{8} = \frac{4}{8} + \frac{1}{8} = \frac{5}{8}$ $\frac{8}{8} - \frac{5}{8} = \frac{3}{8}$ |
| Q25 | 6 |
| Q26 | $\frac{93}{100}$ |
| Q27 | 20 |
| Q28 | $17.36 \times 3 = 52.08$ |
| Q29 | 135° |
| Q30 | 63 |
| Q31 | 7 |
| Q32 | $120 - 5 = 115$ $115 \div 5 = 23$ |
| Q33 | $8424 \div 3 = \$2808$ |
| Q34 | $\$2.70 + \$1.55 = \$4.25$ $\$50 - \$4.25 = \$45.75$ |

| | | | | | |
|-----|---|-----------------------------------|------|-------|----------------------|
| Q35 | $23.25 \div 3 = 7.75$ | | | | |
| Q36 | $7 + 3 = 10$ $10 + 8 = 18$ $8 \div 2 = 4$ years | | | | |
| Q37 | A | | | | |
| Q38 | a) Point D is north-east of B. b) South | | | | |
| Q39 |  | | | | |
| Q40 | | Statement | True | False | Not possible to tell |
| | a) | $\angle x$ is 45° | | ✓ | |
| | b) | $\angle y$ is equal to $\angle z$ | ✓ | | |

SECTION C

| | | | | | |
|-----|--|--|--|--|--|
| Q41 | $24 \times 2 = 48$ $256 - 48 = 208$ $208 \div 4 = \$52$ The cap cost \$52 | | | | |
| Q42 | a) $\frac{10}{10} - \frac{7}{10} = \frac{3}{10}$ Kenny took $\frac{3}{10}$ of the candies in the bag. b) 4 units = 24 1 units = $24 \div 4 = 6$ 10 units = 60 There were 60 candies in the bag at first | | | | |
| Q43 | a) $4.05 - 3.45 = 0.6$ $0.60 \div 3 = 0.2$ b) $3.45 - 0.2 = 3.25\text{kg}$ | | | | |
| Q44 | a) 1600 b) $4000 \times 8 = \$32000$ | | | | |

Q45

a)

| Pattern No | Number of shaded squares | Number of unshaded squares | Total number of squares |
|------------|--------------------------|----------------------------|-------------------------|
| 1 | 12 | 4 | 16 |
| 2 | 16 | 9 | 25 |
| 3 | 20 | 16 | 36 |
| 4 | 24 | 25 | 49 |

b) $10 + 3 = 13$

$$13 \times 13 = 169$$

There are a total of 169 square in figure 10.