



**CATHOLIC HIGH SCHOOL**  
**END-OF-YEAR EXAMINATION 2012**  
**MATHEMATICS**  
**PRIMARY 3**

Name : \_\_\_\_\_ (       )

Class: Primary 3 \_\_\_\_\_

Date: 24 October 2012

Duration: 1 h 45 min

Section A	40
Section B	40
Section C	20
Total Marks	100

Parent's Signature: \_\_\_\_\_

There are 3 sections consisting of 16 pages in this paper.

Section A: Multiple-Choice Questions (MCQ)      20 x 2 marks

Section B: Open-Ended Questions                      20 x 2 marks

Section C: Story Sums                                      5 x 4 marks

**SECTION A: Multiple-Choice Questions (20 x 2 marks)**

For each of the questions from 1 to 20, 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 (OAS)

1. What does the digit 4 in 4507 stand for?

- (1) 40 ones
- (2) 40 tens
- (3) 40 hundreds
- (4) 40 thousands

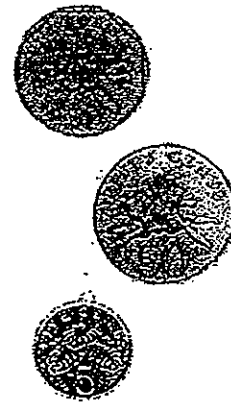
( )

2. Express 6 km 3 m in metres. The answer is \_\_\_\_\_.

- (1) 63 m
- (2) 603 m
- (3) 6003 m
- (4) 6030 m

( )

3. What is the total amount of money shown below?



- (1) \$18.85
- (2) \$19.56
- (3) \$20.55
- (4) \$20.65

( )

4. Clara bought a box of apple tarts that costs \$2.40  
She also bought a box of egg tarts that costs \$1.70  
How much did she pay in all?

- (1) \$0.70
- (2) \$1.30
- (3) \$3.10
- (4) \$4.10

( )

5. 7356 is 1000 less than \_\_\_\_\_.

- (1) 6356
- (2) 7356
- (3) 8356
- (4) 9356

( )

6. There are \_\_\_\_\_ groups of 9 in 72.

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

7.  $\frac{3}{4}$  is equivalent to \_\_\_\_\_.

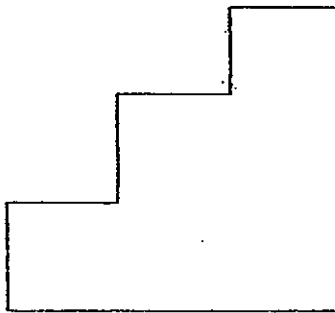
- (1)  $\frac{5}{6}$
- (2)  $\frac{5}{8}$
- (3)  $\frac{6}{8}$
- (4)  $\frac{8}{12}$

( )

8. Find the sum of 430 and 3762.

- (1) 3192
  - (2) 3332
  - (3) 4192
  - (4) 8062
- (       )

9. How many angles **within** the figure are bigger than a right angle?



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

10. What is the difference between the values of the digit 6 in 6400 and 3600?

- (1) 540
  - (2) 2800
  - (3) 3000
  - (4) 5400
- (       )

11. The product of 450 and 4 is the same as \_\_\_\_\_ tens.

- (1) 18
  - (2) 180
  - (3) 1800
  - (4) 18000
- (       )

12. Mrs Tjio needed 140 clips for a project. She only had 7 boxes of clips. Each box contained 12 clips. How many more clips did she need for her project?

(1) 56  
(2) 84  
(3) 121  
(4) 159

( )

13. When Tom added 3145 and 5682, his answer was 8727. The digit in the \_\_\_\_\_ place of Tom's answer is wrong.

(1) ones  
(2) tens  
(3) hundreds  
(4) thousands

( )

14. Mrs Goh spent  $\frac{5}{12}$  h on cooking and  $\frac{1}{4}$  h on washing the dishes. How much time did she spend on both chores?

(1)  $\frac{1}{6}$  h  
(2)  $\frac{1}{3}$  h  
(3)  $\frac{1}{2}$  h  
(4)  $\frac{2}{3}$  h

( )

15. How many thirds are there in  $2\frac{6}{9}$ ?

$2\frac{6}{9}$   
2 wholes

(1) 6  
(2) 8  
(3) 17  
(4) 24

( )

16.  $6 \times 4 = \underline{\hspace{2cm}} \times 3$

- (1) 8
- (2) 21
- (3) 24
- (4) 72

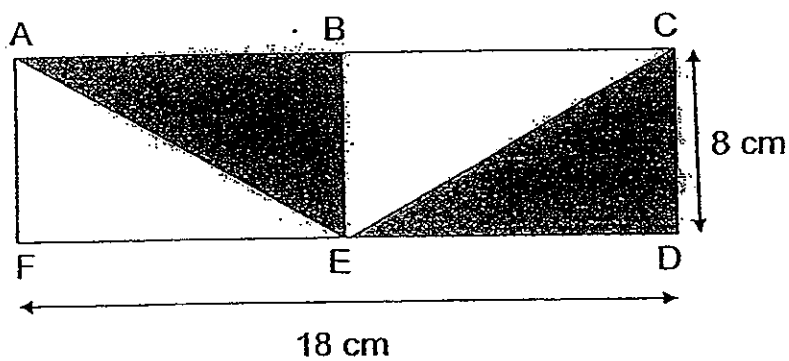
( )

17. Peter's watch was faulty. It read half past 3 p.m. when the actual time was 3.15 p.m. If his watch read 5.05 p.m., what was the actual time?

- (1) 4.20 p.m.
- (2) 4.50 p.m.
- (3) 5.20 p.m.
- (4) 5.50 p.m.

( )

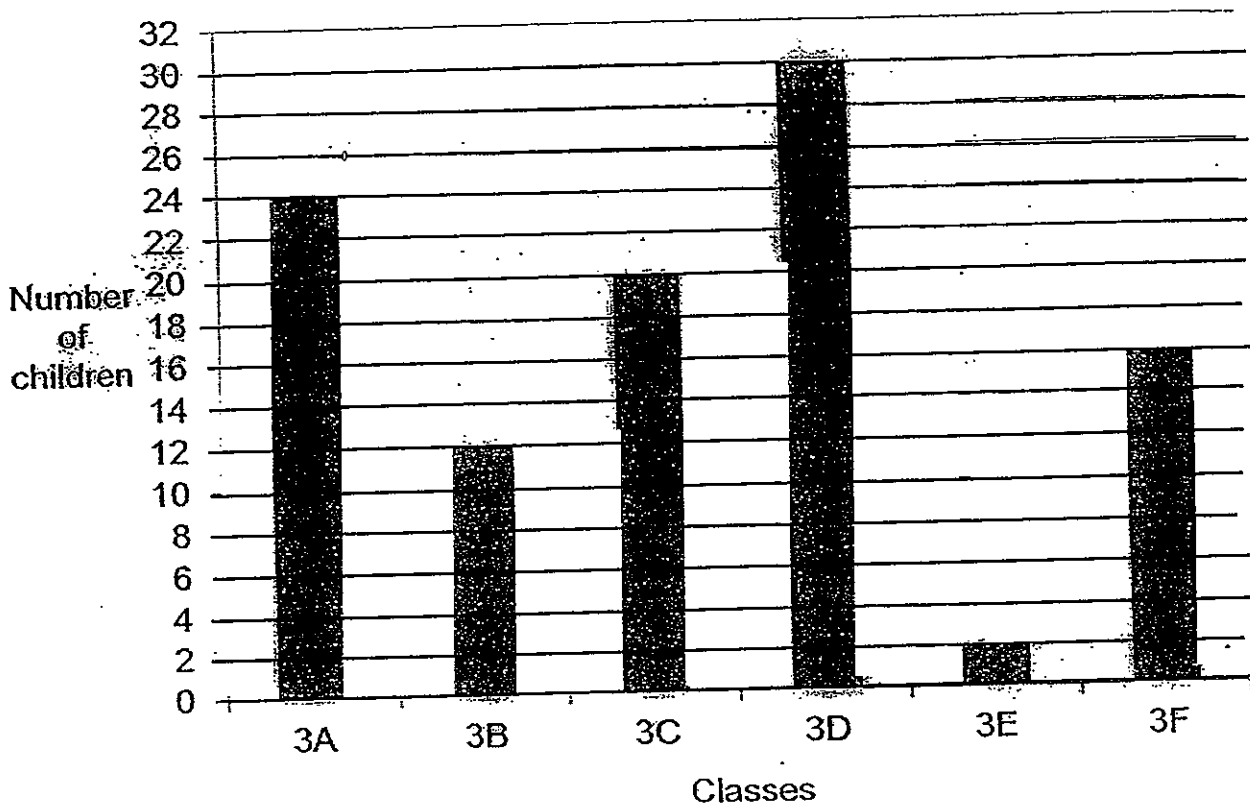
18. Find the shaded area of the figure below. ABEF and BCDE are identical rectangles.



- (1)  $36 \text{ cm}^2$
- (2)  $52 \text{ cm}^2$
- (3)  $72 \text{ cm}^2$
- (4)  $144 \text{ cm}^2$

( )

The graph below shows the number of children who like to eat chocolate ice-cream. Use it to answer questions 18 and 19.



19. If there are 37 children in class 3F, how many children do not like to eat chocolate ice-cream?

- (1) 16
- (2) 21
- (3) 43
- (4) 53

( )

20. Which class has half as many children who like to eat chocolate ice-cream as class 3A?

- (1) 3B
- (2) 3C
- (3) 3E
- (4) 3F

( )

**SECTION B: Open-ended Questions (20 x 2 marks)**

Write the correct answers in the answer boxes provided. Show your working.

21. What is the missing number in the blank below?

2617, 2667, \_\_\_\_\_, 2767, 2817

Ans:

22. Mr Lim earns \$185 in a day. How much will he ~~earn~~ in a week?

Ans:

23. Arrange the following fractions in descending order.

$\frac{1}{8}$  ,  $\frac{2}{5}$  ,  $\frac{3}{11}$

Ans:

24. Form the smallest 4-digit even number with the following digits.

2 , 0 , 5 , 9

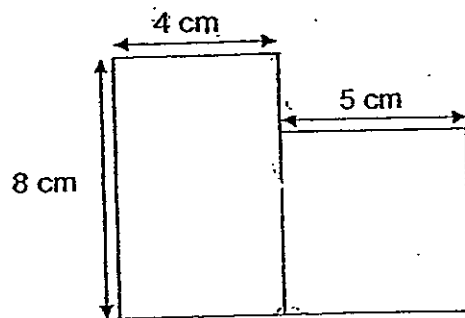
Ans:



25. The product of two numbers is 260. The smaller number is 4.  
What is the difference in the value between the two numbers?

Ans:

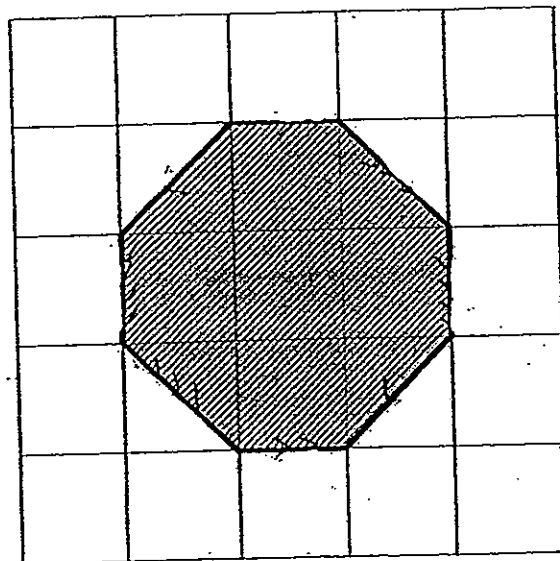
26. The figure below is made up of a rectangle and a square. Find its area.



Ans:

 cm<sup>2</sup>

27. The shaded figure is drawn on a square grid.  
How many pairs of parallel lines form the shaded figure below?



Ans:

28. Express 175 minutes in hours and minutes.

Ans:

h min





29. 720 children were watching a swimming competition at a complex. There were thrice as many girls as boys at the complex. How many boys were watching the swimming competition?

Ans:

30. John paid a total of \$250 for 2 identical watches and 1 teddy bear. A teddy bear cost \$70. How much did each watch cost?

Ans:

\$

31.   $\times$   =  +  +  + 

What is the value of  ?

Ans:

32. Study the number patterns below.  
What is the value of 'Z'?

5	2
5	23

7	5
7	44

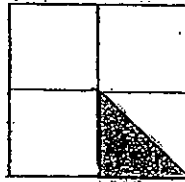
9	Z
9	71

Ans:

33. Jane has 8 boxes of sweets. There are 25 sweets in each box. She repacks the sweets equally into 5 bags. How many sweets will there be in each bag?

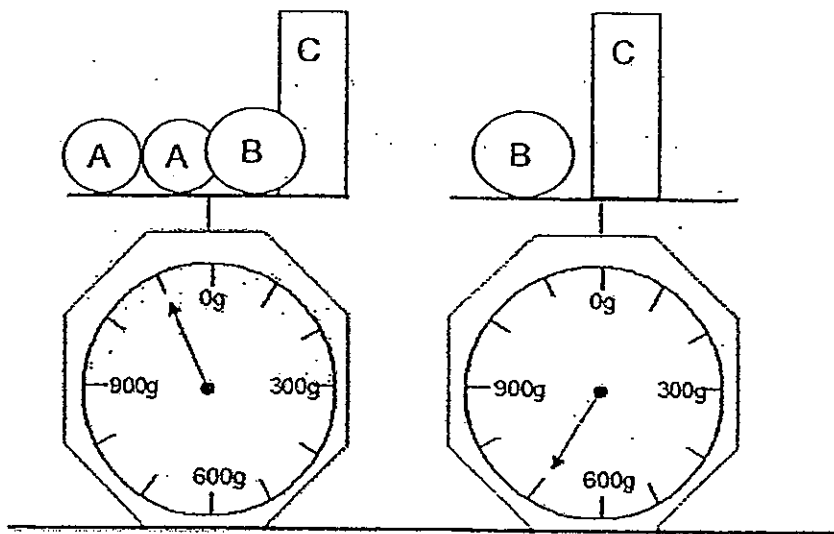
Ans:

34. The figure below is made up of 4 identical squares. What fraction of the figure is shaded?



Ans:

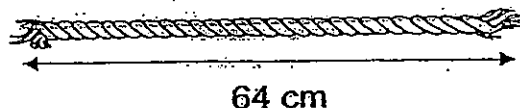
35. Look at the pictures carefully. Find the mass of object A.



Ans:

 g

36. The length of a piece of rope is 64 cm. Samuel cuts the rope into equal pieces of length 8 cm each. How many cuts did he make?



Ans:

37. When a tank is filled with 33 l of water, it is only  $\frac{1}{3}$  full. What is the capacity of the tank?

Ans:

 l

38. In 6 year's time, the total age of Clement and his mother will be 63 years. If Clement is 9 years old now, what is his mother's age now?

Ans:

 years old

39. Timothy and Alice had the same amount of money. How much money must Timothy give to Alice so that Alice would have \$24 more than Timothy?

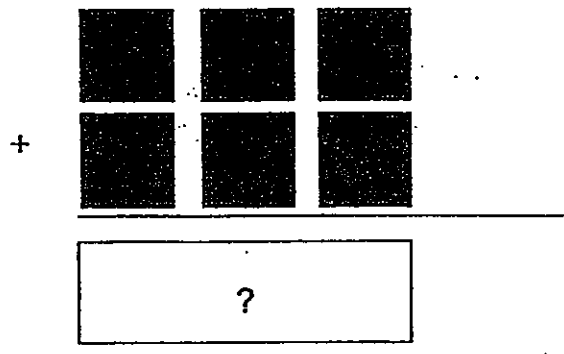
Ans:

40. Denise has 6 number cards as shown below.



She places all the cards in the shaded boxes below. Each card can only be used once.

What is the smallest sum she can get?



Ans:

**SECTION C: Story Sums (5 x 4 marks)**

Solve the following story sums. All workings must be shown clearly.

Draw models if necessary.

41. In a class,  $\frac{2}{5}$  of the pupils like badminton,  $\frac{1}{3}$  of the pupils like volleyball and the rest like softball.
- (a) What fraction of the class like softball?
- (b) What fraction of the class like volleyball and softball?

Leave your answer in the simplest form.

Ans: a) \_\_\_\_\_ [2]

b) \_\_\_\_\_ [2]

42. Guo Quan has 86 more erasers than Muthu. How many erasers must Guo Quan give Muthu so that Guo Quan will have 40 more erasers than Muthu?

Ans: \_\_\_\_\_ [4]

43. Emma and Francis had an equal number of stickers at first. After Emma bought twice the number of stickers of what she had at first and Francis gave away 8 stickers, Emma had 4 times as many stickers as Francis. How many stickers did Francis have at first?

Ans: \_\_\_\_\_ [4]

44. Ali ran thrice as far as Benson.  
Benson ran 240 m less than Carl.  
Carl ran 360 m less than Ali.  
How far did Carl run?

Ans: \_\_\_\_\_ [4]



45. The pattern below is made up of a series of black and white counters. The figures show the number of black and white counters needed to form each T-shape.



Figure 1  
(4 counters)

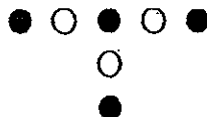


Figure 2  
(7 counters)

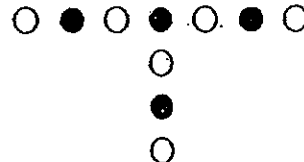


Figure 3  
(10 counters)

Figure number	Number of white counters	Number of black counters	Total number of counters
1	3	1	4
2	3	4	7
3	6	4	10

(a) Find the number of white counters for Figure 4.

(b) Find the number of black counters for Figure 4.

(c) Find the total number of counters for Figure 10.

Ans: a) \_\_\_\_\_ [1]

b) \_\_\_\_\_ [1]

c) \_\_\_\_\_ [2]

END OF PAPER

☺ Please check your work. ☺



# Answer Ke

**EXAM PAPER 2012**

**SCHOOL : CATHOLIC HIGH**  
**SUBJECT : PRIMARY 3 MATHEMATICS**

**TERM : SA2**

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

Q18	Q19	Q20
3	2	1

21)2717      22)\$1295      23)2/5, 3/11, 1/8      24)2590      25)61

26)57cm<sup>2</sup>      27)4      28)2h 55min      29)180 boys      30)\$90

31)4      32)10      33)40      34)18/      35)200g      36)7

37)99L      38)42 years old      39)\$12      40)381

41)a)  $15/15 - 6/15 - 5/15 = 4/15$   
 4/15 of the class like softball.

b)  $5/15 + 4/15 = 9/15$   
 $9/15 = 3/5$   
 3/5 of the class like volleyball and softball

42)  $2u \rightarrow 86 - 40 = 46$   
 $1u \rightarrow 46 \div 2 = 23$   
 Guo Quan must give Muthu 23 erasers.

43)  $4u \rightarrow 1u + 8 + 1u + 1u + 8$

$4u \rightarrow 3u + 24$

$1u \rightarrow 24$

F at first  $\rightarrow 1u + 8$

$\rightarrow 24 + 8$

$= 32$

Francis had 32 stickers at first.

44)  $240 + 360 = 600$

$600 \div 2 = 300$

$300 + 240 = 540$

Carl run for 540m.

45)a)  $6 + 0 = 6$

There are 6 white counters in Figure 4.

b)  $4 + 3 = 7$

There are 7 black counters in Figure 4.

c) The is a total of 31 counters in Figure 10