



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

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

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

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



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

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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

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5. 7356 is 1000 less than _____.

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

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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) $\frac{8}{12}$

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8. Find the sum of 430 and 3762.

(1) 3192

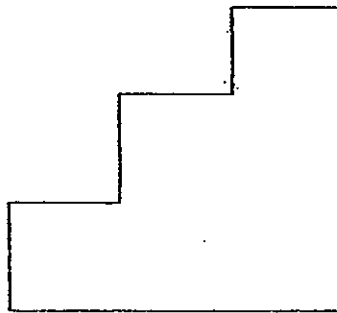
(2) 3332

(3) 4192

(4) 8062

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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

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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

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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

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15. How many thirds are there in $\frac{16}{9}$?

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

2 wholes

()

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

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

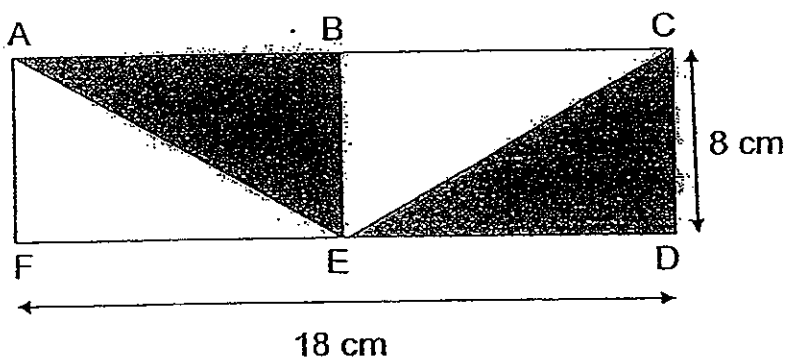
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17. Peter's watch was faulty. It read half past 3 p.m. when the actual time was 3.15 p.m. If his watch read 5.05 p.m., what was the actual time?

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

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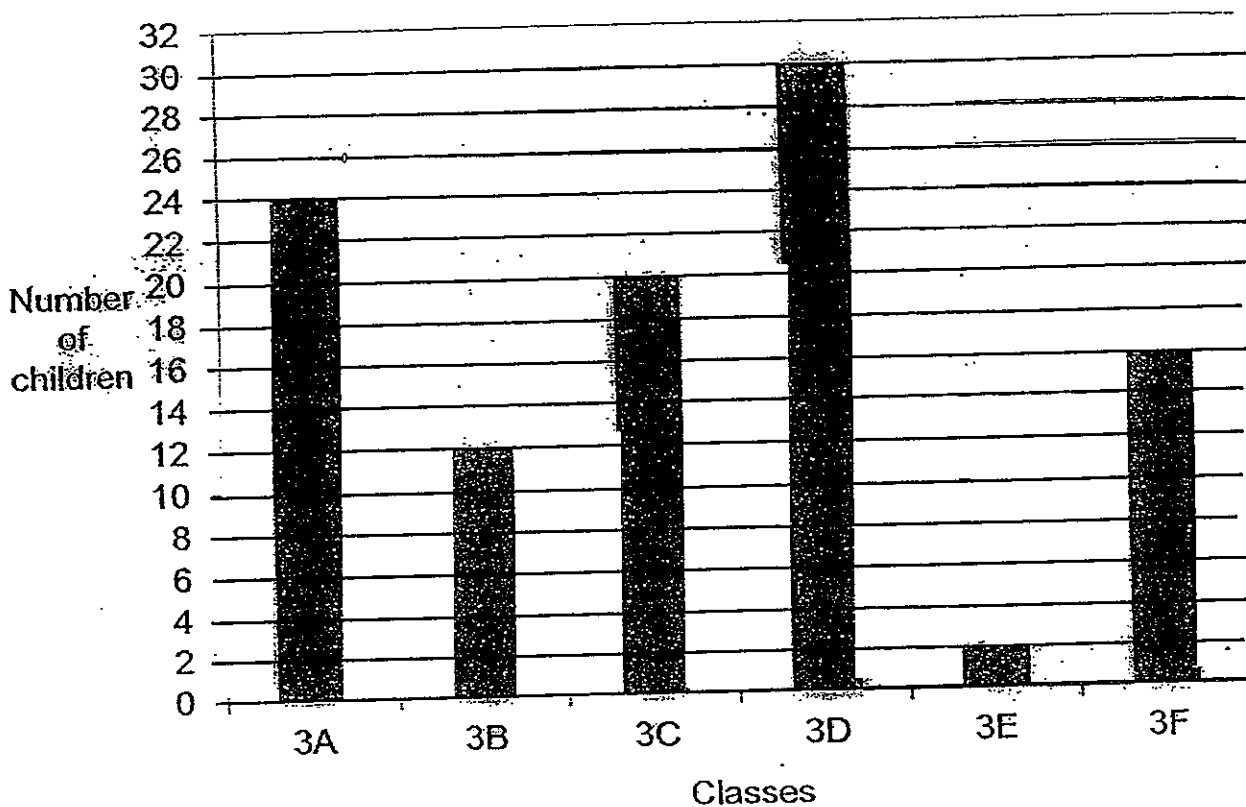
18. Find the shaded area of the figure below. ABEF and BCDE are identical rectangles.



- (1) 36 cm^2
- (2) 52 cm^2
- (3) 72 cm^2
- (4) 144 cm^2

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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

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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.

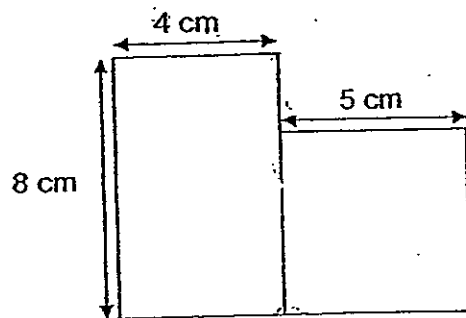
2 , 0 , 5 , 9

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?

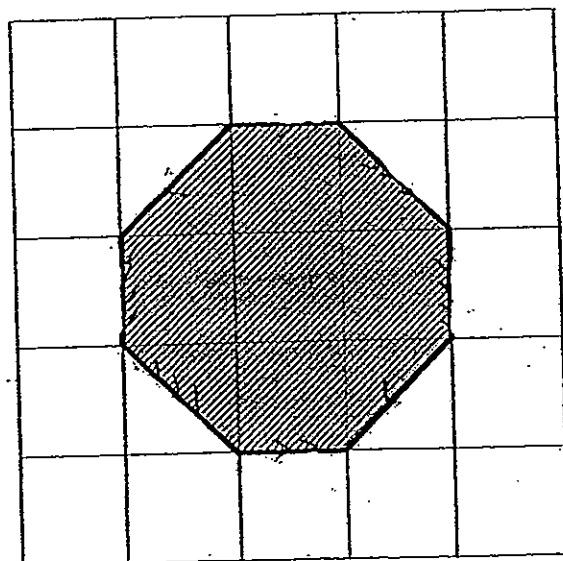
Ans:

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



Ans:

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
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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.  ×  =  +  +  + 

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

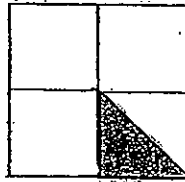
9	Z
9	71

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?

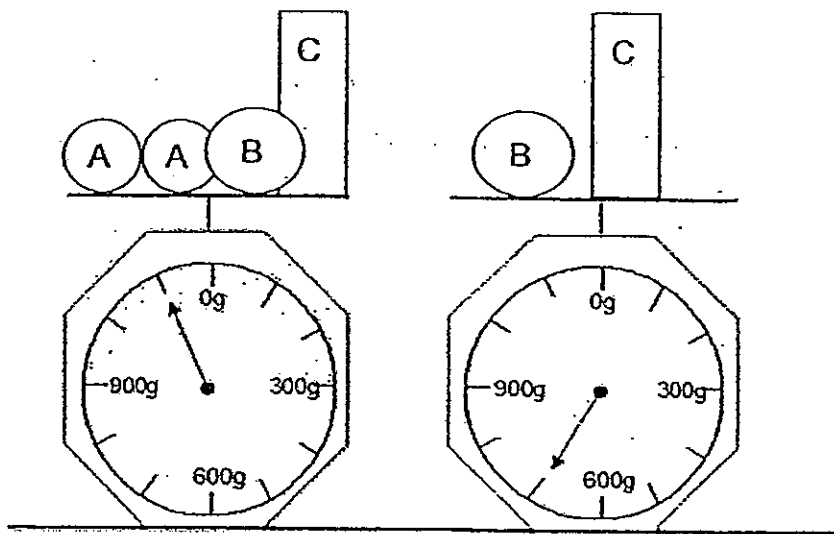
Ans:

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



Ans:

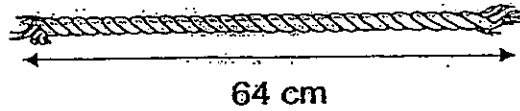
35. Look at the pictures carefully. Find the mass of object A.



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?

$$\begin{array}{r}
 \blacksquare \quad \blacksquare \quad \blacksquare \\
 + \quad \blacksquare \quad \blacksquare \quad \blacksquare \\
 \hline
 \square \quad ? \\
 \hline
 \end{array}$$

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)

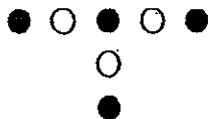


Figure 2
(7 counters)

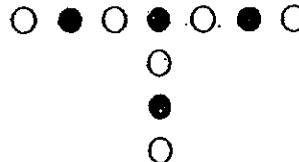


Figure 3
(10 counters)

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

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ANSWER SHEET

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)57cm² 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 → $86 - 40 = 46$
1u → $46 \div 2 = 23$

Guo Quan must give Muthu 23 erasers.

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

$$4u \rightarrow 3u + 24$$

$$1u \rightarrow 24$$

$$F \text{ at first} \rightarrow 1u + 8$$

$$\rightarrow 24 + 8$$

$$= 32$$

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