CATHOLIC HIGH SCHOOL

MID-YEAR EXAMINATION 2014

MATHEMATICS

PRIMARY 5

PAPER 1

(BOOKLET A)

Name :_____(   )

Class: Primary 5_____

Date: 20 May 2014

Total Time for Booklets A and B: 50 min

15 questions

20 marks

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.

The use of calculators is **NOT** allowed.

Booklet A and B consist of 12 printed pages.

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

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1. In 1 234 567, which digit is in the ten thousands place?

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

---

2. What is the sum of all the common factors of 8 and 12?

    (1)   6
    (2)   7
    (3)   14
    (4)   15

---

3. Express 12 : 20 in its simplest form.

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

---

4. Round off 3.175 to the nearest tenth.

    (1)   3.1
    (2)   3.2
    (3)   3.17
    (4)   3.18

---

5. Find the value of $\frac{4}{7} - \frac{1}{3}$

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

   (2) $\frac{5}{21}$

   (3) $\frac{7}{21}$
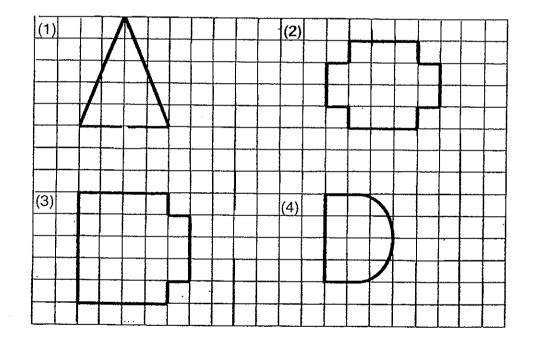
   (4) $\frac{12}{21}$

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6. $\frac{6}{15} = \frac{\square}{35}$

   What is the missing number in the box?

   (1) 7
   (2) 2
   (3) 14
   (4) 26

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7. $245 \times 48 = 245 \times 50 - \boxed{}$

   What is the missing number in the box?

   (1) 48
   (2) 2
   (3) 245
   (4) 490

---

8. The area of a square is 36 cm². What is the length of each side of the square?

(1) 6 cm

(2) 9 cm

(3) 12 cm

(4) 18 cm

9. The following figures are drawn on a square grid.
Which one of the following figures has 2 lines of symmetry?

10. Find the product of $\frac{3}{4}$ and 12.

    (1) $\frac{1}{16}$

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

    (3)   9

    (4)   16

---

11. Joshua bought a sack of coffee powder. He repacked the coffee powder equally into six smaller bags. The mass of coffee powder in each bag was 1.3 kg. He had 0.4 kg of coffee powder left unpacked. How much coffee powder did Joshua buy at first?

    (1)   1.7 kg

    (2)   7.4 kg

    (3)   7.8 kg

    (4)   8.2 kg

---

12. The number of cookies Peter has to the number of cookies James has is 5 : 3. Peter has 20 cookies more than James. How many cookies do they have altogether?

    (1)   10

    (2)   30

    (3)   50

    (4)   80

---

13. Joseph bought $\frac{5}{8}$ kg of flour. He packed the flour equally into 4 bags with no flour left over. What is the total mass of 1 bag of flour?

(1) $\frac{5}{32}$ kg

(2) $\frac{1}{16}$ kg

(3) $2\frac{1}{2}$ kg

(4) $6\frac{2}{5}$ kg

---

14. John bought $\frac{4}{5}$ m of string. He then used $\frac{3}{4}$ of the string to tie a parcel. How much of the string was left?

(1) $\frac{1}{20}$ m

(2) $\frac{1}{5}$ m

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

(4) $\frac{3}{5}$ m

---

15. Abigail and Bonnie had an equal number of marbles at first. After Abigail gave away 150 marbles and Bonnie lost 30 marbles, Bonnie had thrice as many marbles as Abigail. How many marbles did Abigail have in the end?

(1) 60

(2) 90

(3) 120

(4) 180

END OF BOOKLET A

CATHOLIC HIGH SCHOOL

MID-YEAR EXAMINATION 2014

MATHEMATICS

PRIMARY 5

PAPER 1

(BOOKLET B)

Name : _____ ( )

Class: Primary 5 _____

Date: 20 May 2014

Total Time for Booklets A and B: 50 min

15 questions

20 marks

Booklet A	
Booklet B	
Total	

INSTRUCTIONS TO CANDIDATES

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

Follow all instructions carefully.

Answer all questions.

Write your answers in this booklet.

The use of calculators is **NOT** allowed.

Booklet A and B consist of 12 printed pages.

Questions **16** to **25** carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

16. Write one million, seven hundred and eighty-nine thousand and thirty-five in figures.

Ans:

17. Express 3.375 as a mixed number in the simplest form.

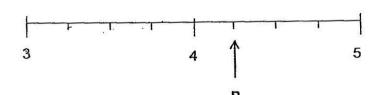Ans: _____

18. Round off 27 495 to the nearest thousand.

Ans: _____

19.   Joseph had 13 000 sweets. He packed all of them equally into bags of 500 sweets each. How many bags did Joseph use?

Ans:_____

20.   Sam made some fruit punch with $1\frac{1}{4}$ ℓ of orange juice and $2\frac{1}{6}$ ℓ of water. How much fruit punch did Sam make?

Ans:_____ ℓ

21.   What is the smallest 5-digit odd number that can be formed using the following digits? All digits must be used and each digit can only be used once.

| 3 | 6 | 0 | 5 | 2 |

Ans:_____

22. Find the value of $870 - 10 \times (35 - 15) + 2$.

Ans: _____

23. What is the value of P in the number line below?
     Give your answer as a decimal.

Ans: _____

24. A machine can print 3000 cards every 15 minutes. How many cards can it print in 1 hour?

Ans:_____

25. Jimmy has 30 marbles. Sammy has 40 marbles more than Jimmy. Find the ratio of Sammy's marbles to the total number of marbles the two boys have.
Express the ratio in the simplest form.

Ans: _____

Total marks for questions 16 to 25
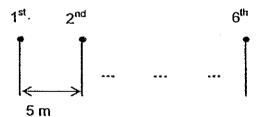
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9

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

(10 marks)

26. Find the value of $5 \div 3$. Give your answer correct to 2 decimal places.

Ans: _____

27. Arrange the following fractions from the smallest to the largest.

Ans: _____

28. The ratio of the number of hamsters to the number of rabbits to the number of chinchillas in a pet shop is 4 : 5 : 3. There are a total of 288 animals. How many chinchillas are there in the pet shop?

Ans: _____

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29. Peter placed some pins in a straight line at equal distance from one another on the floor. The distance between the 1st and the 2nd pin is 5 m. Find the distance between the 1st and the 6th pin.

m

11

30. How many more triangles must be shaded so that the ratio of the Do not write in this space.
number of unshaded triangles to the total number of triangles is 1 : 3?

▲ ▲ △ △ △ △ △ △ △
▲ ▲ △ △ △ △ △ △

Ans: _____

Total marks for questions 26 to 30

END OF BOOKLET B
END OF PAPER 1

12

CATHOLIC HIGH SCHOOL

MID-YEAR EXAMINATION 2014

MATHEMATICS

PRIMARY 5

PAPER 2

Name : _____ (   )

Class: Primary 5 _____

Date: 20 May 2014

Total Time: 1 h 40 min

Parent's Signature: _____

INSTRUCTIONS TO CANDIDATES

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

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

Follow all instructions carefully.

Answer all questions.

Write your answers in this booklet.

The use of an approved calculator is expected, where appropriate.

This booklet consists of 16 printed pages.

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)

1. Susie is twice as heavy as Joan. Mary weighs $\frac{1}{3}$ of Joan's weight. The 3 girls weigh 105 kg. How heavy is Mary?

Ans: _____ kg

2. The ratio of the number of blue beads to the number of red beads on a chain is 3:2. How many blue beads are there if there are 140 red beads?

Ans: _____

1

3. Ken had 250 bottle caps. He gave $\frac{2}{5}$ of the bottle caps to his neighbour. How many bottle caps did he have left?
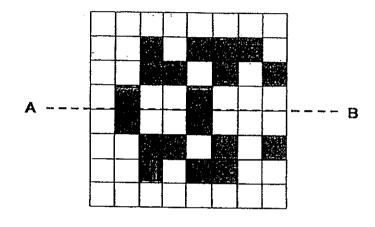
Ans: _____

4. Jia Wei bought 1500 g of strawberries at $1.55 per 100 g How much did he pay for the strawberries?

Ans: $_____

5. The dotted line AB is a line of symmetry.
   Shade 2 squares to form a symmetric figure.

A - - - - - - - - - - - - - - B

3

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)

6.   At a carnival, $\frac{1}{3}$ of the people are children and $\frac{1}{9}$ of the people are men
     The rest are women. There are 400 women. How many people are there
     at the carnival?

Ans: _____ [3]

4

7. A total of 300 files and notebooks were given to some children. Each child received 3 files and 2 notebooks. How many files were there?

Ans: _____ [3]

5

8. Amy and Benny had 615 stickers. Benny and Charles had 318 stickers. Amy had 4 times as many stickers as Charles. How many stickers did Charles have?

Ans: _____ [3]

(Go on to the next page)

9. Catherine had thrice as much money as Andy at first. After Catherine gave Andy $450, Andy had 7 times as much money as Catherine. How much money did Catherine have at first?

Ans: _____ [3]

10. Alan and Belinda had 540 cards at first. After Alan sold 80 cards and Belinda bought 20 more cards, each of them had the same number of cards left.How many cards did Alan have at first?

Ans: _____ [3]

11. Linda spent $500 of her salary on transport. She spent $\frac{4}{7}$ of her remaining money on food. If she had $\frac{1}{3}$ of her salary left, how much was her salary?

Ans: _____ [4]

12. The table shows the charges for bicycle rental.

BICYCLE FOR RENTAL	
Charges for the first bicycle : For first hour For every additional $\frac{1}{2}$ hour	 $6 $2
Charges for the second bicycle onwards	Half the charges for the first bicycle.

Larry rented 2 bicycles at the same time and paid a total of $24. What is the maximum number of hours Larry rented the bicycles for?

Ans: _____[4]

13. Melvin has 155 stamps more than Danny. Edward has thrice the total number of stamps that Melvin and Danny have. The 3 boys have 2780 stamps altogether. How many stamps does Melvin have?

Ans: _____ [4]

11

14. The rectangular figure WXYZ is made up of 6 squares, A, B, C, D, E and F.
Squares C, D, E and F are identical. The perimeter of square B is 64 cm.
Express the area of square F as a fraction of the area of square A.
Leave your answer in the simplest form.

Ans: _____ [4]

15. At a fruit stall, the apples were sold at $0.50 each.
Mangoes were sold at $2 each.
Queenie bought a total of 35 mangoes and apples for $25.
How many apples did she buy?

Ans: _____ [4]

(Go on to the next page)

13

16. A group of children shared a bag of sweets. Every boy was given 3 sweets and every girl was given 4 sweets. The ratio of the number of boys to the number of girls was 1 : 2. There were 748 sweets in the bag. How many children were there in the group?

Ans: _____ [5]

(Go on to the next page)

14

17. Nathan and Owen were given a box of chocolates. Nathan took $\frac{1}{4}$ of the chocolates and 5 more pieces of chocolates from the box. Owen took $\frac{1}{5}$ of the remaining chocolates and 4 more pieces of chocolates from the box. There were 28 pieces of chocolates left. How many pieces of chocolates were in the box at first?

Ans: _____ [5]

15

18. Gerald bought an equal number of cupcakes and tarts for a party. The cupcakes were bought at 7 for $20 and the tarts were bought at 5 for $30. He paid $550 more for the tarts than for the cupcakes.
How much did Gerald pay for the cupcakes and tarts altogether?

Ans:: _____ [5]

End of Paper 2

EXAMS PAPER 2014

SCHOOL: CATHOLIC HIGH SCHOOL
SUBJECT: MATHEMATICS
LEVEL: PRIMARY 5
TERM: SA1

PAPER 1
BOOKLET A

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
3	2	4	2	2	3	4	1	2	3

Q11	Q12	Q13	Q14	Q15
4	4	1	2	1

BOOKLET B

Q16   1789035
Q17   3¾
Q18   27000
Q19   26
Q20   3 5/12
Q21   20365
Q22   672
Q23   4.25
Q24   12000 cards
Q25   7:10
Q26   1.67
Q27   ½, ⅔, ¾
Q28   72
Q29   25
Q30   8

PAPER 2

Q1

M→1U
→105÷10=10.5
Mary is10.5kg.
Ans: 10.5kg

Q2   2u→140
      1U→40:2=70
      3U→70x3=210
There are 210 blue beads.

Ans: 210 blue beads

Q3 Total →250
2/5Total→2/5x250=100
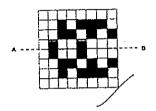left→250-100=150
He had 150 bottle caps left.
Ans: 150 bottle caps

Q4 1500g÷100g=15
15x$1.55=$23.25
Ans:$23.25

Q5

Q6 5u→400
1u→400÷5=80
Total→9u
→80x9=720
There were 720 people at the carnival.
Ans: 720 people

Q7 1 child →3+2=5
no of children→300÷5=60
no of files→60x3=180
There are 180 files.
Ans: 180 files

Q8 Amy→4u
Charles→1u
A+B=615
C+B=318
3u→615-318=297
1u→297÷3=99
Charles had 99 stickers.
Ans: 99

Q9 At first   In the end
C:A   C:A
3:1   1:7
Total→4u   Total→8u
↓   ↓
C:A   C:A
6:2   1:7
Total→8u   Total→8u
6u-1u=5u

Q15   1A→$0.50

       1M→$2

Guess and Check

Mangoes	Apples	Total	(check) ✓/X
7×12=84	18×0.50=9	$34+$9 =$43	X
15×12=$30	20×50=$10	$30+$10=$40	X
1×12=120	24×50=$12	$24+$12=$36	X
1×12=$12	60×50=$5	$18+$13=$31	X
7×12=$14	18×5=$4	$14×$14=$28	X
5×12=$10	60×5=$10	$10+$15=$25	✓

no of apples →30

She bought 30 apples.

Ans: 30 apples

Q16   1 boy→3 sweets

       1 girl→4 sweets

       no of children in 1 group

       B:G

       1:2

       1 group →1 boys+ 2 girls
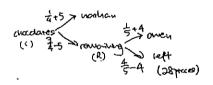
                →3 sweets +8 sweets=11sweets

       no of groups→748sweets÷11sweets=88sweets

       Total children→68groupsx(1+2)=204children

       There were 204 children.

       Ans: 204 children

Q17

left→4/5R-4=28

4/5R→28+4=32

1/5R→32÷4=8

5/5R→8x5=40

40→3/4c-5

3/4c→40+5=45

1/4c→45÷3=15

4/4c→15x4=60

There were 60 pieces of chocolate.

Ans:60pieces

Q18   7c→$20

       5T→$30

       1T→$30÷5=$6

5u→$450
1u→$450÷5=$90
C at first→6u
       →$90x6=$540
Catherine had $540 at first.
Ans: $540

Q10   A | 1u | 20 | -80 | } 540 + 20 - 80
      B | 1u | x20 |
540+20=560
2u→560-120=440
1u→440÷2=220
A at first→220+100=320
Alan had 320 cards at first.
Ans: 320 cards

Q11   Salary→$500(transport)
         ↘remaining→⁴/₇(food) } ⅔s
                 ↘³/₇(left) } ⅓s

3u→⅓s
6u→⅔s
6u-4u=2u
2u→$500(transport)
1u→$500÷2=$250
Total s→9u→$250x9=$2250
Her total salary is $2250.
Ans: $2250

Q12
1st bike $6 $2 $2 $2 $2 $2   } $16   } $24
           1hr ½h ½h ½h ½h ½h   } 3½hrs
2nd bike   } $8
           1hr ½h ½h ½h ½h ½h   } 3½hrs
Larry rented the bicycles for 3½hours.
Ans: 3½ hours

Q13   8u→2780-(155x4)=2160
1u→2160÷8=270
M→270+155=425
Melvin has 425 stamps.
Ans: 425 stamps

Q14   P of B→64cm
L of B→64÷4=16cm
L of F→16÷2=8cm
A of F→8x8=64cm²
L of A→16cmx2=32cm
A of A→32cm x32cm=1024cm²
A of F/A of A→64/1024→1/16
The fraction is 1/16
Ans: 1/16

no of cupcakes	no of tarts	Diff	x / ✓
7→$20	7→$42	$22	x
70→$200	70→$420	$220	x
147→$420	147→$882	$462	x
175→$500	175→$1050	$550	✓

$500+$1050=$1550