

#### **END-OF-YEAR EXAMINATION 2015 MATHEMATICS** PAPER 1 (BOOKLET A) **PRIMARY FIVE**

Name:(	)	Class: Primary 5
,		•
Date: 30 October 2015	Durati	on of Booklets A & B: 50 minutes

## INSTRUCTIONS TO CANDIDATES

- This question paper consists of 6 printed pages, including the cover page

- Follow all instructions earefully.

  Shade your answers on the Optical Answer Sheet (OAS) provided
  You are not allowed to use a calculator.

Questions 1 to 10 carry 1 mark each. Question 11 to 15 carry 2 marks each.

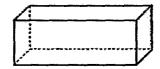
Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS).

(20 marks)

- 1. Find the value of  $(48-36) \div 4 + 2$ .
  - 1) 5
  - 2) 2
  - 3) 41
  - 4) 42
- 2. In 3 975 628, the digit '7' is in the \_\_\_\_\_ place.
  - 1) thousands
  - 2) ten thousands
  - 3) hundred thousands
  - 4) millions
- 3. Which of the following is the same as 7080 g?
  - 1) 7 kg 8 g
  - 2) 7 kg 80 g
  - 3) 70 kg 8 g
  - 4) 70 kg 80 g

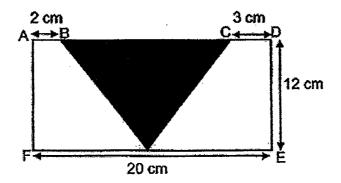
- 4. Find the sum of  $\frac{2}{5}$  and  $\frac{1}{3}$ .
  - 1)  $\frac{3}{8}$
  - 2)  $\frac{1}{15}$
  - 3)  $\frac{3}{15}$
  - 4)  $\frac{11}{15}$
- Figure 1. Regina had some candies. After giving away 12 candles, she had  $\frac{2}{3}$  of her candies left. How many candies did she have at first?
  - 1) 8
  - 2) 18
  - 3) 24
  - 4) 36
- 6. Express  $2\frac{3}{5}$  as a decimal.
  - 1) 2.06
  - 2) 2.30
  - 3) 2.35
  - 4) 2.6

- 7. The length of a ribbon is 78.06 cm. Kim cut it into 3 parts. What is the length of each part?
  - 1) 26.02 cm
  - 2). 26.20 cm
  - 3) 260.2 cm
  - 4) 2602 cm
- 8. How many right angles are there on all the surfaces of the cuboid below?



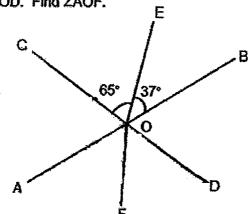
- 1) 12
- 2) 24
- 3) 3
- 4) 4
- 9. The average of three numbers is 90. The sum of two of the numbers is 40, what is the value of the third number?
  - 1) 10
  - 2) 50
  - 3) 190
  - 4) 230
- 10. Express  $\frac{5}{8}$  as a percentage.
  - 1) 12.5%
  - 2) 13%
  - 3) 40%
  - 4) 62.5%

- 11. Find the product of 241.032 and 100. Round off your answer to the nearest whole number.
  - 1) 2
  - 2) 24
  - 3) 2410
  - 4) 24103
- 12. In the figure below, ADEF is a rectangle. AB = 2 cm and CD = 3 cm.
  Find the area of the shaded part.



- 1) 90 cm<sup>2</sup>
- 2) 150 cm<sup>2</sup>
- 3) 180 cm<sup>2</sup>
- 4) 240 cm<sup>2</sup>

13. In the figure below, not drawn to scale. AB and CD are straight lines.  $\angle AOF = \angle FOD$ . Find  $\angle AOF$ .



- 1) 28°
- 2) 37°
- 3) 51°
- 4) 65°
- 14. The pupils at a camp are divided equally into Team X and Team Y. The ratio of the number of boys to the number of girls in Team X is 2:1 and the ratio of the number of boys to the number of girls in Team Y is 4:11. What is the ratio of the number of boys to the number of girls at the camp?
  - 1) 1:2
  - 2) 2:1
  - 3) 7:8
  - 4) 8:7
- 15.  $\frac{1}{4}$  of a number is 50. What is 140% of the number?
  - 1) 15
  - 2) 70
  - 3) 200
  - 4) 280



### **END-OF-YEAR EXAMINATION 2015 MATHEMATICS** PAPER 1 (BOOKLET B) PRIMARY FIVE

Name:	(	)	Class: Primary 5
Date: 30 October 2015	Durati	on of P	aper Booklets A & B: 50 minutes
			Parent's/Guardian's signature

### INSTRUCTIONS TO CANDIDATES

- 1. This question paper consists of & printed pages, including the cover page.
- Do not turn this page until you are told to do so.
   Follow all instructions carefully.

- 4. Answer all questions.
  5. You are not allowed to use a calculator.

	Allen and Allen	
Paper 1 Booklet A. Multiple-Choice Questions	20	
Paper 1 Booklet B. Short Answers: Part 1	10	
Paper 1 Booklet B. Short Answers: Part 2	10	
Total Marks	40	

Questions 16 to 25 carry 1 mark each. Write your answers in the spaces provided. Give your answers to the units stated and to its simplest form whenever necessary. (10 marks) What is the missing number in the box below? 16. 1 × 10 000 + 9 × 1 000 + 4 × 100 + 3 × 10 + 1 Answer: 17. Arrange the following fractions from the smallest to the greatest.  $\frac{3}{10}$ ,  $\frac{1}{3}$ ,  $\frac{3}{11}$ 5 hundreds, 6 tenths and 7 thousandths is 18.

Answer:

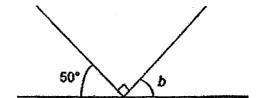
19.	Find 85% of \$500.
	Answer: \$
20.	There were 4 000 females at a concert, 80% of the audience were males.
	How many people were there at the concert altogether?
	Answer:
21.	Three girls shared a sum of money in the ratio 11:4:7. The smallest share was \$24. What was the total sum of money?
-	

Answer: \$\_

22.	Jack has 100 large and small erasers. The ratio of the number of large erasers to the number of small erasers is 1 : 4. Each small eraser costs \$0.50. What is the cost of all the small erasers?
23.	Answer: \$  Mr Chan had an equal number of \$2 and \$5 notes. The value of all the
	notes was \$196. How many \$5 notes did Mr Chan have?
	Answer:

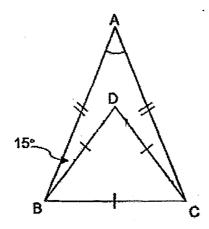
.

24. The figure below is not drawn to scale. Find  $\angle b$ .



Answer: \_\_\_\_\_

25. In the figure below, not drawn to scale, triangle ABC is an isosceles triangle and triangle BCD is an equilateral triangle. AB = AC and ∠ABD =15°. Find ∠BAC.

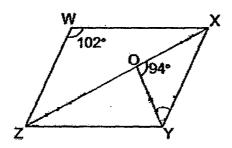


Answer: \_\_\_\_\_

Questions 26 to 30 carry 2 marks each. Show all mathematical statements clearly in the space below each question and write your answers in the spaces provided. Give your answers to the units stated and to its simplest form whenever necessary.

(10 marks)

26. In the figure below, not drawn to scale, WXYZ is a rhombus. ∠XWZ = 102° and ∠XOY = 94°. Find ∠XYO.



Answer: \_\_\_\_\_

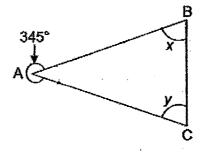
27. The average mass of 15 boys is 40 kg. The total mass of 8 boys is 425 kg. Find the average mass of the remaining 7 boys.

Answer: kg

28. In a class of 35 pupils, 40% of them are boys and the rest are girls.
5 more boys have joined the class. How many percent of the pupils are girls now?

Answer: \_\_\_\_\_\_ %

29. In the figure below, not drawn to scale, ABC is a triangle. Find the sum of  $\angle x$  and  $\angle y$ .

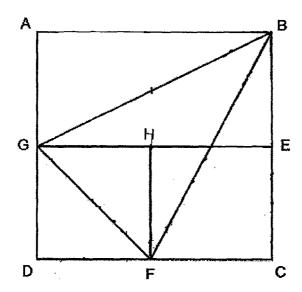


Answer: \_\_\_\_\_°

30. In the figure below, the area of square ABCD is 144 cm<sup>2</sup>.

The area of square GHFD is  $\frac{1}{4}$  the area of ABCD.

Find the area of the triangle BFG.



Answer: - cm

**End-of-Paper** 



#### **END-OF-YEAR EXAMINATION 2015 MATHEMATICS** PAPER 2 **PRIMARY FIVE**

Name:	_(	)	Class: Primary 5
	**		
Date: 30 October 2015			4

### INSTRUCTIONS TO CANDIDATES

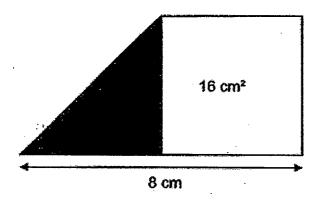
- This question paper consists of 14 printed pages, including the cover page.
   Do not turn this page until you are fold to do so:
- Follow all instructions carefully
- Answer all questions
  You are allowed to use a calculator.

Paper 2		
Section A. Short Answers	10	
Paper 2		
Section B. Problem Sums	50	
Tatal Made		Control of the Contro
Total Marks	60	

Questions 1 to 5 carry 2 marks each. Show your mathematical statements clearly in the space provided for each question and write your answers in the spaces provided. Give your answers to the units stated and to its simplest form whenever necessary.

(10 marks)

1. The figure below is made up of a right-angled triangle and a square. The area of the square is 16 cm<sup>2</sup>. Find the area of the shaded triangle.

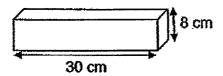


Answer:	cm <sup>2</sup>
* *****	

2. The table below shows the charges for sending a parcel. Rachel sent a parcel of mass 170 g. How much did she pay?

Mass of Parcel	Charges
For the first 100 g	\$2.50
For every additional 50 g or	\$1.50
part thereof	

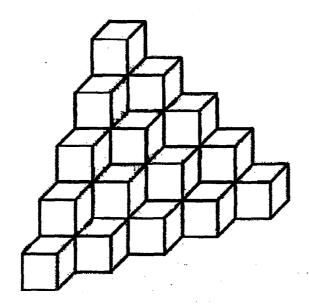
3. The figure below shows a cuboid with a square face of side 8 cm. Find the volume of the cuboid.



					- 5
Answer:				 	cm,

4. Mr Tan borrowed \$30 000 from the bank to renovate his house. The interest per year for the loan is 5%. How much must be repay in total after 1 year?

5. The figure below is made up of identical 1 cm-cubes. What is the volume of the total number of cubes in the figure below?



Answer: \_\_\_\_\_ cm<sup>3</sup>

For questions 6 to 18, show your steps clearly in the space provided for each question and write your answers in the spaces provided.

For questions which require units, give your answers in the units stated.

The number of marks available is shown in brackets [ ] at the end of each question or part-question.

(50 marks)

6. There are three strings of different lengths. The total length of String X and String Y is 73.8 cm. The total length of String Y and String Z is 105.6 cm. Given that String Y is twice the length of String X, find the length of String Z.

Answer:		[3]
COPPOSITION .		 101

7. Geraldine bought a total of 420 candies and lollipops. After giving away  $\frac{1}{4}$  of the candies and  $\frac{1}{2}$  of the lollipops, she was left with twice as many candles as lollipops. Find the number of lollipops Geraldine gave away.

8.	Alice paid \$14.25 for some oranges and apples. Each orange costs
	\$0.65 and each apple costs \$0.20 less than an orange. There were 5
	more oranges than apples. How many apples did she buy?

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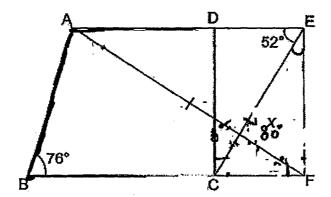
9. The usual price of a television was \$2 500. Jack bought the television at a discount of 30% before GST. The GST is 7%. How much did he pay for the television?

10. Muthu and Ali had a number of playing cards in the ratio 3:5. Ali and Samuel had a number of playing cards in the ratio 2:3. If they had a total of 248 playing cards altogether, how many more playing cards did Samuel have than Muthu?

	r.e.s
Answer:	[3]

11. Ashley spent 30% of his salary on food and \$350 on petrol. He then gave  $\frac{3}{5}$  of his remaining money to his parents and spent \$120 on a pair of shoes. He had \$300 left. How much is his salary?

12. In the figure below, not drawn to scale, ABCD is a trapezium and CDEF is a rectangle. AF and CE are straight lines. AF = BF.
 ∠ABF = 76° and ∠DEC = 52°. Find ∠x.



Answer: \_\_\_\_\_\_[4

13. Kimberly had 3/11 as many 20-cent coins as \$1 coins. After she spent 8
 \$1 coins, she had 1/3 as many 20-cent coins as \$1 coins. How much money did she have in the end?

Answer: [4]

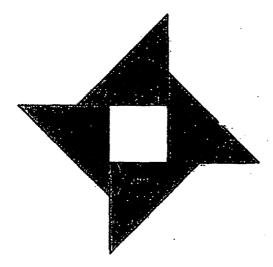
14.	The average test score of a group of pupils was 70 marks. After two pupils with an average test score of 75 marks left the group, the average test score of the remaining pupils became 68. How many pupils were there in the group at first?					

Answer:

(4]

15.	At first, Sam has 700 stamps more than Robert. After Sam sold 50% of his stamps and Robert gave away 70% of his stamps, Sam has 750 more stamps than Robert. How many stamps did Sam have at first?					
·						
	· ·	. •				
	Annuar	r <i>a</i> 1				

16. The figure below is not drawn to scale. It has a square in the centre which is formed by 4 identical right-angled isosceles triangles. The shaded area of the figure is 242 cm².



- (a) Find the perimeter of the square.
- (b) Find the area of the square.

Answer: (a) \_\_\_\_\_\_[3]

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

17.	Pauline had \$1 143 and Julie had \$1 878. After spending the same
	amount of money each, the ratio of Pauline's money to Julie's money
	then became 3 : 10.

- (a) How much money did each of them spend?
- (b) How much money did they have left altogether?

Answer: (a)			
·(b)		12	

18. A farmer planted apple seedlings in rows such that there were 15 seedlings in each row. The farmer planted 7 more seedlings and rearranged them. There are now 11 seedlings in each row and 9 more rows than before. How many apple seedlings did the farmer plant in total?

Answer:	 [5

## **Answer Key**

SCHOOL:

**ANGLO-CHINESE SCHOOL (PRIMARY)** 

LEVEL

**PRIMARY 5** 

SUBJECT:

**MATH** 

TERM

SA<sub>2</sub>

### **PAPER 1 BOOKLET A**

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

Q 11	Q12	Q13	Q14	Q15
4	1	3	3	4

### **PAPER 1 BOOKLET B**

Q16) 75

Q17) 3/11, 3/10, 1/3

Q18) 500.607

Q19) \$425

Q20) 20 000

Q21) \$132

Q22) 5u → 100

1u → 20

 $4u \rightarrow 20 \times 4 = 80$ 

 $80 \times \$0.50 = \$40$ 

Q23) 
$$$2 + $5 = $7$$
  
 $$196 \div $7 = 28$ 

Q26) 
$$\angle WXZ = \angle ZXY$$
  
 $\angle ZXY = (180^{\circ} - 102^{\circ}) \div 2$   
 $= 39^{\circ}$   
 $\angle XYO = 180^{\circ} - 94^{\circ} - 39^{\circ}$   
 $= 47^{\circ}$ 

Q27) 
$$15 \times 40 = 600$$
  
 $600 - 425 = 175$   
 $175 \div 7 = 25$ 

Q28) 
$$100\% \rightarrow 35$$
  
 $1\% \rightarrow 35 \div 100 = 0.35$   
 $40\% \rightarrow 0.35 \times 40 = 14$   
 $35 - 14 = 21$   
 $21 \div 40 = 52.5\%$ 

Q29) 
$$360^{\circ} - 345^{\circ} = 15^{\circ}$$
  
 $180^{\circ} - 15^{\circ} = 165^{\circ}$ 

Q30) 1 square 
$$\Rightarrow$$
 144 ÷ 4 = 36  
2 squares  $\Rightarrow$  36 x 2 = 72  
 $\triangle$ ABG =  $\triangle$ BCF  
Rect ABEG (2 squares) =  $\triangle$ ABG +  $\triangle$ BCF  
= 72  
 $\triangle$ GHF = 36 ÷ 2 = 18  
Area of  $\triangle$ BFG  $\Rightarrow$  18 cm<sup>2</sup> + 36 cm<sup>2</sup> = 54cm<sup>2</sup>

## PAPER 2

Q1)	16 ÷ 4 = 4	
	8-4=4	
	½ x 4 x 4 = 8	
	Ans : <u>8 cm</u> <sup>2</sup>	·
Q2)	\$1.50 x 2 = \$3.00	
	\$2.50 + \$3.00 = <u>\$5.50</u>	
		·
Q3)	30 x 8 x8 = <u>1920</u>	
Q4)	5/100 x \$30 000 = \$1 500	
	\$30 000 + \$1 500 = <u>\$31 500</u>	
Q5)	Level 1 → 1	
	Level 2 → 1 + 2 = 3	
	Level $3 \to 3 + 3 = 6$	
	Level 4 → 6 + 4 = 10	
	Level 5 → 10 + 5 = 15	
	Total $\rightarrow$ 1 + 3 + 6 + 10 + 15 = 35	
	Ans : <u>35 cm</u> <sup>3</sup>	•
Q6)	Y = 2X	
	X + Y = 73.8	
	X + 2X = 73.8	
	3X = 73.8	
	$X = 73.8 \div 3$	
	= 24.6	
	$Y = 2 \times 24.6$	
	= 49.6	
	Y + Z = 105.6	
	Z = 105.6  cm - 49.6  cm	
<u> </u>	= <u>56.4 cm</u>	

Q7)	C left $\rightarrow 1 - \frac{1}{4} = \frac{3}{4}$					
	L left → ½					
	3/4C = 2x(2/4L)c					
	= L					
	1/4 C = 1/3 L					
	4/4  C = 4/3 L					
	420 = 2 1/3L					
	= 7/3 L					
	7u → 420					
	1u → 420 ÷ 7 = 60					
	$3u \to 60 \times 3 = 180$					
	½ L → 180 ÷ 2 = <u>90</u>					
Q8)	5 Oranges → \$0.65 x 5 = \$3.25					
	Equal Oranges & Apples → \$14.25 - \$3.25 = \$11.00					
	1 orange → \$0.65					
	1 apple → \$0.65 - \$0.20 = \$0.45					
	1 orange + 1 apple → \$0.65 + \$0.45 = \$1.10					
•	No. of sets → \$11 ÷ \$1.10 = 10					
	Ans : 10 apples					
Q9)	100% → 2500					
	1% → 2500 ÷ 100 = 25					
	$30\% \rightarrow 25 \times 30 = 750$					
	2500 – 750 = 1750					
	He paid 100% + 7% = 107%					
	= 1.07					
	\$1750 x 1.07 = <u>\$1872.50</u>					

Errata:

Please ignore answers Q10 to Q Q10) 490 - 90 = 400 $S \rightarrow 400 \div 2 = 200$ 490 - 130 = 360 $360 \div 2 = 180$  $B \rightarrow 490 - 200 - 180 = 110$ Q11) \$4.40 + \$0.20 = \$4.60  $0.20 \times 5 = 1.00$ \$4.60 - \$1.00 = \$3.60  $$3.60 \div 9 = $0.40$  $5 \times \$0.40 = \$2.00$ \$4.40 - \$2.00 = \$2.40 Q12) 60 + 36 = 96 $96 \div 3 = 32$  $32 \times 2 = 64$ 64 + 36 = 100100 + 60 = 160160:100 8:5 Q13) \$560 (Refrigerator) **→** 7/15 1 whole **7** 5/8 (TV) − **>** ? (5/15) 3/8 (left) → 1/5 = 3/15  $R \times 3/8 = 1/5$  $R = 1/5 \div 3/8$ = 8/15  $TV \rightarrow 5/8 \times 8/15 = 1/3 = 5/15$ 

Refrigerator  $\rightarrow 1 - 5/15 - 3/15 = 7/15$ 

Errata:

Please ignore answers Q10 to Q

		•
1u	<b>→</b>	\$560 ÷ 7 = \$80

$$15u \rightarrow $80 \times 15 = $1200$$

Ans: \$1200

Q14) 
$$Vol \rightarrow 45 \times 15 \times 29 = 19575$$

Pails 
$$\rightarrow$$
 3 x 5 = 15

= 15000 cm<sup>3</sup>

$$19575 - 15000 = 4575$$

Ans : 4574

Q15) 
$$5+7=12$$

$$12 \times 7 = 84$$

$$3 \times 3 = 9$$

Total Area of Fig  $\rightarrow$  84 + 9 = 93

$$84 \div 2 = 42$$

Shaded rect.  $\Rightarrow$  2 x 5 = 10

$$42 - 10 = 32$$

$$7 + 3 = 1$$

Total shaded  $\rightarrow 93 - 32 - 15 = 46$ 

Ans: 46 cm<sup>2</sup>

$$$7 \times 7 \rightarrow $49$$

$$$28 \div 4 = $7$$

# Errata:

Please ignore answers Q10 to Q

	11u → \$7 x 11 = \$77
	Total → \$77 + \$49 = \$126
ļ ļ	Ans: \$126
-047)	D . D . C . TOTAL (D.D.C)
Q17)	R: B: G: TOTAL(R+B+G) 5: 3: 4: 12
·	
-, -	20 : 12 : 16 : 48
	12u → 144 + 48 = 192
	1u → 192 ÷ 12 = 16
	At First
	$R \to 16 \times 5 = 32$
}	$B \rightarrow 16 \times 3 = 48$ $C \rightarrow 16 \times 4 = 64$
	0 / 10 / 4 = 04
	(i) <u>R : B : G</u>
	32: 48:/64
	2 : 3 (: 4 (Ans)
	(ii)
	Y : R : B : G : TOTAL(Y+R+B+G)
	5 : 3 : 4 :
	5 : 4
	25 : 20 : 12 : 16 : 73
	25 . 20. 12 . 16 . 73
	Total $\to$ 73 x 16 = 1168 (Ans)
Q18)	No. of sets of $3 \to 200 \div 3 = 66 R 2$
	No. of sets of $7 \rightarrow 200 \div 70 = 2 R 60$
	Total discount → 2 x \$8 = \$16
	Total cost $\rightarrow$ (\$10 x 66) + (\$4 x 2) - \$16 = \$652