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# ANGLO-CHINESE SCHOOL (JUNIOR / PRIMARY) PRIMARY PRELIMINARY EXAMINATION 2005 MATHEMATICS BOOKLET A

Name:	<u> </u>	(	)
Class: Primary 6. (	)		,
Date: 23 <sup>rd</sup> August 2005			

Total time for Booklets A & B: 2 h 15 min

### Instructions to candidates

Do not open this booklet until you are told do so.

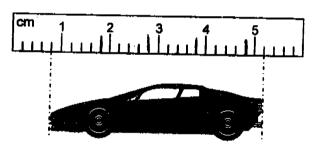
Follow all instructions carefully.

Answer all questions.

Section A (25 marks)

Questions 1 to 5 carry 1 mark each. Questions 6 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 correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS).

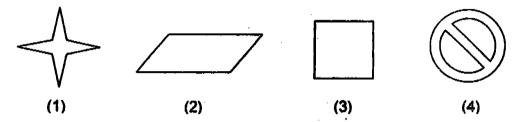
- What is the sum of 13 tens and 13 tenths?
  - (1) 13.13
  - (2) 14.3
  - (3) 130.13
  - (4) 131.3
- 2 What is the value of  $10 + 16 \times 4 + 2 1$ ?
  - (1) 26
  - (2) 41
  - (3) 74
  - (4) 104
- 3 Derek uses a ruler to measure the length of the toy car.



Which of the following is the closest to the length of the toy car shown above?

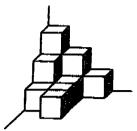
- (1) 4.2 cm
- (2) 4.4 cm
- (3) 5.1 cm
- (4) 5.2 cm
- Andrew has three times as many beads as Justin. If they have a total 132 beads, how many more beads does Andrew have than Justin?
  - (1) 33
  - (2) 44
  - (3) 66
  - (4) 88

- 5 Janet is m years old now. Her father is 30 years older than her. What will be their total age in 8 years' time?
  - (1) m + 38
  - (2) m + 46
  - (3) 2m + 38
  - 2m + 46
- 6 Which of the following shapes has exactly 2 lines of symmetry?



- A circle has a diameter of 14 cm.  $\frac{1}{2}$  of it was shaded. Find the area of the 7 shaded part. (Take  $\pi = \frac{22}{7}$ ).
  - (1)
  - (2)
  - 22 cm<sup>2</sup> 88 cm<sup>2</sup> 154 cm<sup>2</sup> (3)
- 8 The ratio of the number of English books to Malay books in a library was 13: 2. After John bought another 30 English books, the new ratio was 8: 1. How many more English books than Malay books did John have at first?
  - (1) 10
  - 20 (2)
  - (3)110
  - 120
- 9 A dress and a shirt cost \$40. The cost of the shirt is 60% of the cost of the dress. How much does the shirt cost?
  - \$8 (1)
  - (2) \$15
  - (3) \$16
  - \$24

Cubes of the same size with edge 2-cm are stacked in the corner of a box as shown.



What is the volume of the figure?

- (1) 48 cm<sup>3</sup>
- (2) 64 cm<sup>3</sup>
- (3) 80 cm<sup>3</sup>
- (4) 96 cm<sup>3</sup>
- 11 The table below shows how a man spent 24 hours on a particular day.

Activity	Meals	Travel	Work	Leisure	Sleep
No. of	3	2	7	4	8
hours					

What percentage of the day did he spend sleeping, having meals and working?

- (1) 25%
- (2) 62.5%
- (3) 75%
- (4) 83.3%
- Some digits from the two numbers were covered. The average of these two 3-digit numbers is 210. Which of the following is the largest possible second number?

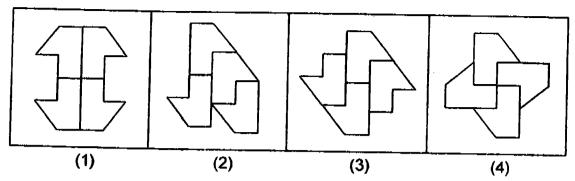
First Number

13

Second Number

- (1) 289
- (2) 290
- (3) 291
- (4) 292

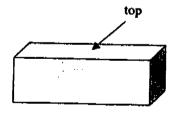
#### 13 Which of the following is part of a tessellation?

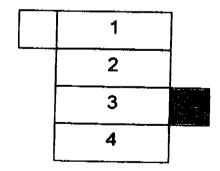


The figure below is obtained by removing 2 semi-circles of radius 7 cm 14 from a rectangle of length 25 cm. (Take  $\pi = \frac{22}{7}$ ). Find the perimeter of the shaded figure.



- (1) 34 cm
- (2) 94 cm
- (3)122 cm
- 196 cm
- A cuboid and its net are shown below. In the net, which of the 4 rectangles 15 (numbered 1 to 4) corresponds with the rectangle at the top of the cuboid?





- 2
- (2) (3)

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## ANGLO-CHINESE SCHOOL (JUNIOR / PRIMARY) PRIMARY PRELIMINARY EXAMINATION 2005

#### **MATHEMATICS**

#### **BOOKLET B**

Name:	( )	
Class: Primary 6. ( )		
Date: 23 <sup>rd</sup> August 2005		
Total time for Booklets A & B: 2	h 15 min	
Instructions to candidates		
Do not open this booklet until you are	told do so.	
Follow all instructions carefully.		
Answer all questions.	Total nescible marks Marks shad	

	Total possible marks	Marks obtained
Section A	25	-
Section B	20	-
Section C	55	<del>-</del>
Total	100	_

Parent's signature: \_\_\_\_\_

#### Section B (20 marks)

Questions 16 to 35 carry 1 mark each. Write your answers in the spaces provided. Give your answers in the units stated.

16 What is the third multiple of 14?

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

17 54 x 69 = 2 x 27 x 23 x
What is the missing number in the blank?

Answer:

What must be added to 56 389 to make half a million?

Answer:

19 6 x  $\frac{3}{4} = \frac{3}{4} + \frac{3}{4} + \boxed{?}$  x  $\frac{3}{4}$  What is the missing fraction in the box?

Answer : \_\_\_\_

20 What is the value of 0.1 + 0.2 + 0.3 + ... + 0.8 + 0.9 + 1.0?

Answer:

B-1

21 Find the value of the missing number.

$$2.358 = 2 + 3 \times 0.1 + 5 \times$$

Answer		
VIIIOMEI	٠	 

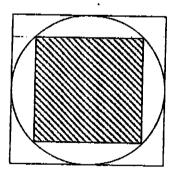
22 Find the missing number.

		•
A		•
Answer	•	• .

Ann and Ben share a piece of cake. Ann's share is  $\frac{2}{5}$  of Ben's share. What fraction of the cake is Ben's share?

_		
Answer	٠	
WIIOMÉ!	٠	_

The figure consists of 2 squares and a circle. What fraction of the figure is shaded?



_		
Answer	•	
11124461	٠	

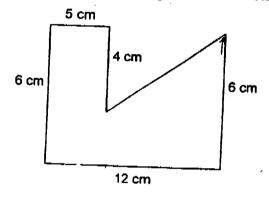
A piece of ribbon is cut into a few pieces. If it is cut into 5 equal pieces, there will be a remainder of 1cm. If it is cut into 4 equal pieces, there will be no remainder. What is the shortest possible length of the ribbon?

Answer	:	 cm

A fence is 80 m long. The fence has posts 500 cm apart. How many poles are needed to build the fence?

<b>Answer</b>	٠	
	•	<del></del>

What is the area of the figure shown below?



Answer	•	 cm²

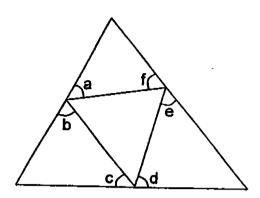
A game lasts for 110 min. The game starts at 2.15 pm. What time does the game end?

<b>A</b>		
Answer	-	
104461	٠	pn
		 211

29	150 g of butter is needed to make a cake. S for her class party. How much butter does st kg)	arah wants to make 10 cakes ne need? (Give your answer in
		Answer:kg
30	The ratio of the length of a rectangle to the brill the breadth is 12 cm, find the perimeter of t	eadth of the réctangle is 7 : 3. he triangle
	,	Answer :cm
31	Gary bought 3 pens and 5 rulers. Each pen of A ruler cost 50¢ each. How much did he pay to	ost twice as much as a ruler. for all the items?
		Answer: \$
32	The figure below is made up of similar squafigure is 12 m <sup>2</sup> , what is the perimeter of the fig	ares. If the total area of the ure?
	1	
		Answer: m
	B-4	Sub – total: {

431 of 470.

Find  $\angle a + \angle b + \angle c + \angle d + \angle e + \angle f$  in the figure.



Answer	:	 `		0
	•	 _	_	 

Sam drove at an average speed of 64 km/h for 45 min. What distance did he travel?

Answer	:	km

35 The table shows the taxi charges.

Taxi charges	Amount of money
1 <sup>st</sup> 2 km	\$2.80
Every additional 100 m	\$0.10

Mr Lim took a taxi to work. The taxi travelled a distance of 5.8 km. How much did he pay for the taxi fare?

Answer:	\$	
	•	

**B-5** 

Sub - total; '

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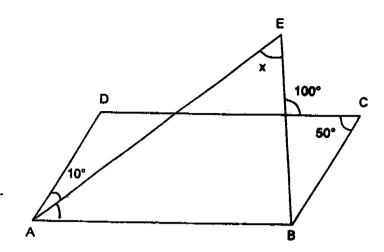
For que The	ction C (55 marks) questions 36 to 50, show your working clearly in the space below each estion and write your answers in the spaces provided. enumber of marks available is shown in brackets [] at the end of each estion.
36	An eraser costs <i>y</i> cents and a stapler costs 80 cents more than an erase What is the cost of 1 eraser and 3 staplers? Express your answer in terms of <i>y</i> in its simplest form.
37	Answer:[2]  James took 3h 40 min to drain out all the water from his swimming pool.
	The water pump was draining the water at a rate of 60 litres per minute. Find the amount of water originally in the swimming pool.
	Answer:

B-6

Sub - total: [

\_ [2]

In the diagram, ABCD is a parallelogram. What is  $\angle x$ ? 38



Answer:	_	 [3]

- Lawrence used a piece of ribbon, 140 cm, to tie a parcel with a square base and a height of 10 cm. He used 20 cm of the ribbon to tie the knot. 39
  - What is the area of the shaded part? What is the volume of the parcel? (a)
  - (b)



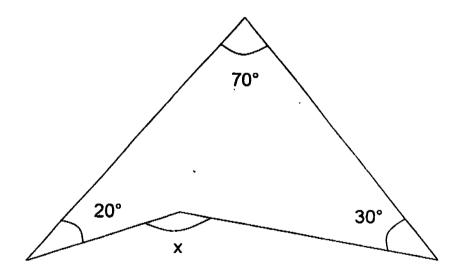
Answer:	a)		<del></del>	[2]
	ь١	-	_	[4]

**B-7** 

Tap X can fill an empty tank in 20 min. Tap Y can empty a similar tank that is fully-filled in 12 min. Both taps are turned on at the same time when the tank is half-filled with water. How long will it take for the tank to be totally emptied?

Answer:		[3]
7113 MGI.	 	. [IJ

41 In the figure below, find  $\angle x$ .



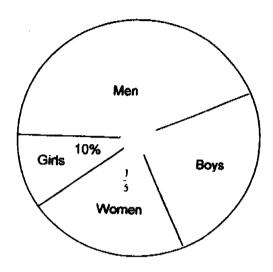
_ [3]

B-8

Sub - total: [

]

- The pie chart below shows the number of people at a match. There were 30 more men than women.
  - (a) Find the number of women at the match.
  - (b) How many per cent more boys than girls are there at the match.



Answer:	a)	[2	]
	٠.١		

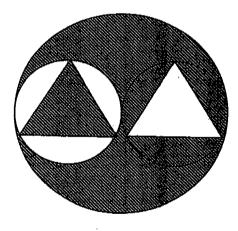
43	Chris	In a carnival, Juliet and Sean sold 226 chicken pies in total. Sean and Christine sold 112 chicken pies altogether. Juliet sold three times as many chicken pies as Christine.		
	(a) (b)	How many chicken ples did Se How many chicken ples did the	<b>an sell?</b> • <b>thre</b> e pupils sell alt	ogether?
		•		
			Answer: a)	[3]
			b)	[1]
<b> 4</b>	left C	were 20 more members in Club Club B for Club A. It was then four members in Club A as in Club E ?	nd that there were th	ree times as
			Answer:	[4]
		B-10		Sub – total: [

The ratio of the number of pencils to the number of pens in a box is 8:3.

After removing 16 pencils and putting in 9 pens, there is now an equal number of pens and pencils in the box. How many pencils were there in the box at first?

\nswer:	 [4]
MISWEL.	[4]

The figure shows a big circle enclosing two similar small circles and two similar equilateral triangles. The radius of each small circle is 5 cm. What is the total area of the shaded parts? (Take  $\pi = 3.14$ ).



Answer:	•	[4
		 LT.

There were 3 times as many tables as chairs in a furniture shop. After selling 53 tables and 7 chairs, there were 3 times as many chairs as tables left in the shop. How many chairs were there in the shop at first?

Answer: \_\_\_\_\_[5]

B-12

A rectangular tank is  $\frac{2}{3}$  filled with water at first. It has a base area of 450 cm<sup>2</sup> and a height of 10 cm. Bernard has some identical cubes, each of side 5 cm. He then puts the cubes one at a time slowly into the tank until the water level reaches its brim.

(No water is spilt while putting in the cubes.)

- (a) What is the volume of water in the tank at first?
- (b) How many cubes has he put into the tank?

Answer: a)	 [2
b)	[3]

B-13

Sub - total: [

1

A rock melon was sold for \$5 each. Each papaya cost 20% less than a rock melon. Mr Tan paid \$460 for some rock melons and papayas. 60% of the fruits he bought were rock melons. How much more money did he spend on rock melons than on papayas?

Answer: \_\_\_\_\_[5]

B-14

- At 12 noon, a motorist left Town A travelling towards Town B at a constant speed. 2 hours later, a van driver started from Town A and travelled along the same road. The van driver overtook the motorist at 5 pm. The speed of the van driver was 40 km/h faster than the motorist.
  - (a) Find the speed of the motorist.
  - (b) Find the distance between Town A and Town B if the van was 80 km away from Town B at 5 pm.
  - How far is the motorist away from Town B when the van driver reached Town B?

Answera)	[2]
b)	[1]
c)	[2]

#### ANGLO CHINESE SCHOOL (JUNIOR/PRIMARY) PRIMARY PRELIMINARY EXAMINATION 2005

MATHEMATICS PRIMARY SIX

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11. 3 . 12. 2

03. 2

13. 3

04. 3

14. 2 15. 1

05. 4

06. 4

07. 1 08. (3)

09. 2 10. 4

16) 42

38) 60°

17) 3

18) 443611

39) a) 200 cm $^2$  b) 4000 cm $^3$ 

40) 15 minutes

19) 4

20) 5.5

41) 120° 42)a) 24

b) 150%

21) 0,01

43) a) 55

b) 283

22) 10000

44) 80

23) 5/7 24) 1/2

45) 40

25) 16

46)  $235.5 \, cm^2$ 

26) 17

47) 19 chairs

27) 58

48) a) 3 litres b) 12

28) 4.05

49) \$ 140

29) 1.5

50) a)  $60 \, km/h$ 

b) 380 km

30) 80

31) 5.50

c) 32 km

32) 16

33) 360

34) 48

35) 6.60

36) (240 + 4y) cents

37) 13200 litres