SINGAPORE CHINESE GIRLS' SCHOOL

FIRST SEMESTRAL ASSESSMENT 2012

PRIMARY 5

MATHEMATICS
PAPER 1

BOOKLET A

Name : _____( )

Class : Primary 5 SY/C/G/SE/P

		Marks attained	Max Mark
Paper 1	Booklet A		20
	Booklet B		20
Paper 2			60
Total Marks	-		100

Parent's Signature

15 Questions
20 Marks

Total Time for Booklets A and B: 50 min

INSTRUCTIONS TO CANDIDATES
Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.
You are not allowed to use a calculator

Booklet A

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 correct oval (1, 2, 3 or 4) on the Optical Answer Sheet. **(20 marks)**

---

1 What is eight hundred and forty thousand and sixty-seven in numerals?

(1) 804 067

(2) 804 607

(3) 840 067

(4) 840 607

2 Express 6.05 as a fraction in the simplest form.

(1) $6\frac{1}{2}$

(2) $6\frac{1}{5}$

(3) $6\frac{1}{20}$

(4) $6\frac{1}{25}$

3. Express 28 km 40 m in kilometres.

(1) 2.84 km

(2) 28.40 km

(3) 28.04 km

(4) 28.004 km

4 Grace has 210 beads. She gives 150 of her beads to Emma. Express the remainder of Grace's beads as a fraction of Emma's beads.

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

2) $\frac{3}{5}$

3) $\frac{2}{3}$

4) $\frac{3}{2}$

5 Find the value of $78 - 24 \div 6 \times 5$.

(1) 20

(2) 45

(3) 54

(4) 58

6 $28 \times 50 = 48 \times 50 - 50 \times$ [ ]. The answer is _____.

(1) 18

(2) 20

(3) 28

(4) 50

7 Siti is 1.56 m tall. Farah is 8 cm taller. What is their **total** height?

(1) 3.2m

(2) 3.28m

(3) 3.92m

(4) 4.01m

8 Find the missing number.

60 500 ÷ [?] = 6.05 x 10

(1) 10

(2) 100

(3) 1000

(4) 10 000

9 Sally is 14 years old. She is twice of Tina's age. Find the ratio of Tina's age to their total age.

(1) 1 : 2

(2) 1 : 3

(3) 2 : 1

(4) 3 : 1

10 Mrs Lim pours $\frac{5}{8}\ell$ of juice equally into 10 glasses. What is the amount of juice in each glass?

(1) $16m\ell$

(2) $\frac{1}{8}\ell$

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

(4) $6\frac{1}{4}m\ell$

11 In a class, $\frac{5}{8}$ of the pupils have mobile phones. $\frac{1}{3}$ of the pupils without mobile phones were boys. In the class, what is the fraction of boys without mobile phones?

(1) $\frac{1}{8}$

(2) $\frac{5}{24}$

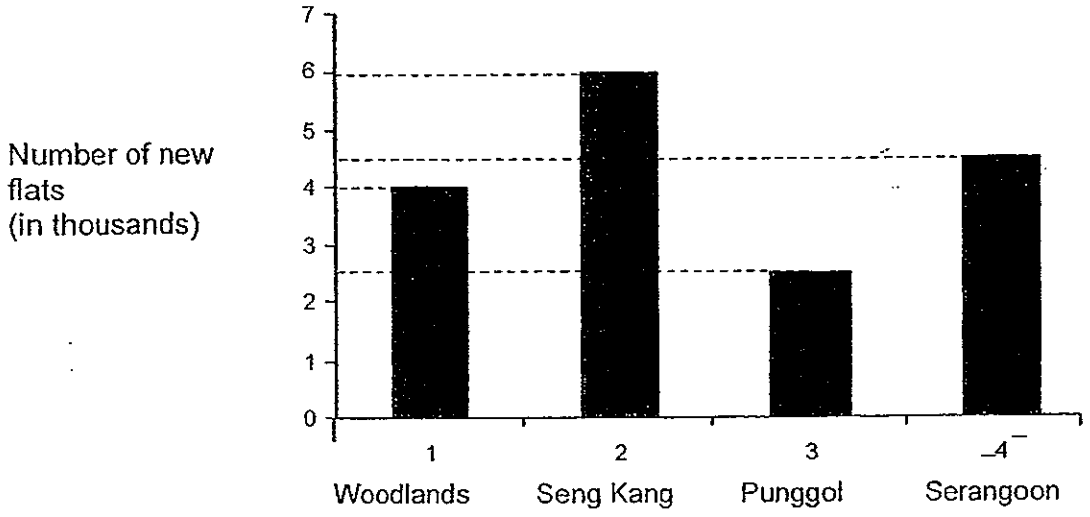
(3) $\frac{1}{4}$

(4) $\frac{5}{12}$

12 The ratio of the number of donuts in Box A to the number of donuts in Box B was 3 : 2. After 4 donuts had been removed from Box A, the number of donuts became the same in both boxes. How many donuts were there in Box B?

(1) 4
(2) 8
(3) 10
(4) 12

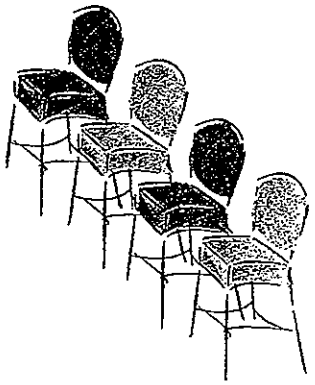
13 The bar graph below shows the number of new flats built in four housing estates last year. How many more new flats were built in Seng Kang than in Serangoon?



(1) 1500
(2) 2000
(3) 3500
(4) 4500

14 10 prefects had to arrange chairs in the auditorium. One of them fell sick and the rest had to arrange 6 more chairs each. How many chairs did they have to arrange altogether?

(1) 54
(2) 60
(3) 540
(4) 600



69

15 $1 + 2 + 3 + 4 + \ldots + 16 + 17 + 18$

What is the digit in the ones place when all the numbers from 1 to 18 are added?

(1) 1

(2) 2

(3) 3

(4) 4

SINGAPORE CHINESE GIRLS' SCHOOL

FIRST SEMESTRAL ASSESSMENT 2012

PRIMARY 5

MATHEMATICS
PAPER 1

BOOKLET B

Name : _____ ( )

Class : Primary 5 SY/C/G/SE

Paper 1	Mark attained	Max Mark
Booklet B		20

15 Questions
20 Marks

Total Time for Booklets A and B: 50 min

INSTRUCTIONS TO CANDIDATES

Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.
You are not allowed to use a calculator

Booklet B

Name:_____( ) **Class:** P5 SY/C/G/SE/P

Do not write in this column

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. $8300 \times 4 = 8000 \times 4 +$ _____ $\times 4$

Ans: _____

17. Express 155 m as a fraction of 1 km. Express your answer in the simplest form.

Ans: _____

18. Evaluate the value of $99 + (98 - 42) \div 7 \times 5$.

Ans: _____

19. Express $\frac{17}{5}$ as a decimal.

Ans: _____

20. The sum of two numbers is 56 and their difference is 24. What is the smaller number?

_____

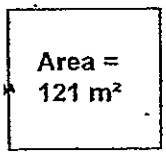
5

21. What is the value of 3.61 + 0.19 + 0.005?

Do not write in this column

Ans: _____

22. The area of a square piece of land is 121 m².
Find the perimeter of the square.

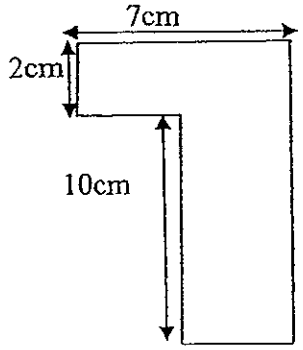


Ans: _____ m

23. The ratio of Winnie's savings to Mary's savings is 5 : 1. If Mary has $128 less than Winnie, how much savings do both the girls have?

Ans: $_____

24. The figure below is not drawn to scale. Find its perimeter.



Ans: _____ cm

73

4

Do not write this column

25. $\frac{5}{12} = \square + \frac{1}{3}$. What is the missing fraction?

Ans: _____

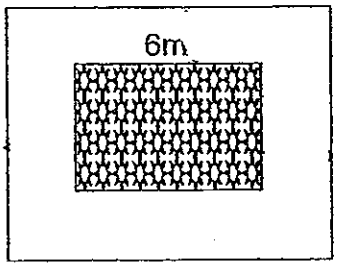
1

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

(10 marks)

Do not write i this column

26. A carpet 6m long is placed on the floor of a rectangular room leaving a border of 1 m all round the carpet. If the area of the room is 56 m^2, what is the width of the carpet?



Ans: _____ m

27. Jean spent $\frac{1}{6}$ of her money on a dress which cost \$60 and $\frac{1}{3}$ of the remaining money on a pair of shoes. How much money had she left?

Ans: \$ _____

28. In a 4-digit number, the digit 2 is in the ones and tens places. The digit in the thousands place is the product of the digits in the ones and tens places. The digit in the hundreds place is twice the digit in the thousands place. What is the number?

75

Ans: _____

6

29. Bala bought a total of 240 apples and oranges in the ratio of 3 : 5 .
After he gave away an equal number of each type of fruits, the ratio of the number of apples to the number of oranges left was 3 : 7
How many oranges ~~did he have~~?
had he left

Do not wr
this colum

30. Mrs Tan bought some grapes. 1 kilogram of grapes cost $5.40. She bought $2\frac{1}{2}$ kg of grapes. How much did she pay for the grapes?

Ans: $_____

4

SINGAPORE CHINESE GIRLS' SCHOOL

FIRST SEMESTRAL ASSESSMENT 2012

PRIMARY 5

MATHEMATICS

PAPER 2

Name : _____( )

Class : Primary 5 SY/C/G/SE

	Mark	Max Mark
Paper 2		60

Parent's Signature

18 Questions
60 Marks

Total Time For Paper 2: 1 h 40 min

INSTRUCTIONS TO CANDIDATES
Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.

Questions 1 to 5 carry 2 marks each. Show your working clearly and write your answers in the space provided. For questions which require units, give your answers in the units stated. **(10 marks)**

Do not write this column

1 Amy weighs 10 kg more than Jessica. Jessica weighs 8 kg less than Cindy. The average mass of the 3 girls is 45 kg. Find Jessica's mass.

Ans; _____ kg

2 Nicole had 5 fifty-cent coins, 9 ten-cent coins and 3 one-dollar coins. She spent $3.85 on a hair clip. How much money had she left?

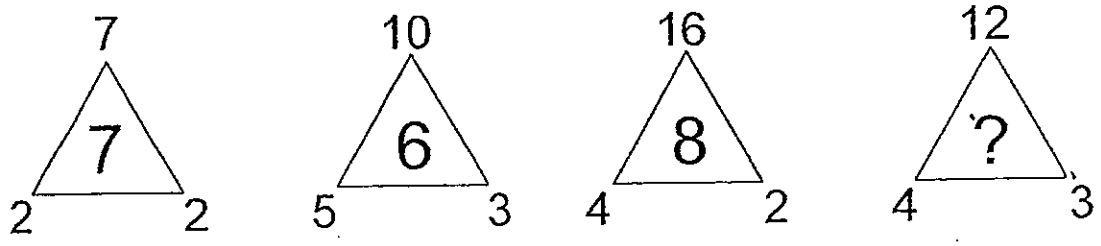
Ans: $ _____

4

3 Tom needs 4 minutes to wrap a present. What is the maximum number of presents he can wrap in one and a half hours?

Ans: _____

4 Study the following number pattern carefully.



What is the missing number in the triangle?

Ans: _____

5 The length of a painting is 2m and its breadth is $1\frac{5}{8}$ m. Find the area of the painting. Express your answer as a decimal, correct to one decimal place.

Ans: _____ m^2

79

6

For questions **6** to **18**, show your working clearly and write your answers in the spaces provided. The number of marks awarded is shown in brackets [ ] at the end of each question or part-question. **(50 marks)**

Do not write i this column

6 $\frac{1}{3}$ of the pupils in a class were born in June and July, $\frac{2}{9}$ of them were born in September and December and one child was born in each of the remaining months. How many pupils were there in the class?

Ans: _____[3]

7 There were 310 adults and 870 children at a party. Halfway through the party, an equal number of adults and children left. In the end, the number of children at the party became five times the number of adults. How many adults left the party midway?

Ans: _____[3]

6

8 Mr. Heng is 4 times as old as his daughter, Karen. His wife is 3 years younger than him. If Karen is 8 years old, what will be the combined age of this family in 3 years' time?

Do not write in this column

Ans: _____ [3]

9 A tank has a mass of 9 kg when it is 0.75 filled with water. Its mass is 7 kg when it is 0.5 filled with water. Find the mass of the empty tank.

_____ [3]

8

6

10 The number of pupils in a school doubled every year.
The school had its full intake of 3600 pupils in the year 2011.
In which year did the school start with an intake of only 225 pupils?

Do not write in this column

Ans: _____ [3]

11 At a concert, there were 40 boys. The number of girls was thrice the number of boys. During the interval, 5 boys left and 20 girls joined the concert. What was the ratio of the girls to the total number of children at the concert after the interval? Give your answer in the simplest form.

Ans: _____ [4]

7

12 The points A, B, C and D are on a straight line. The length of AB is $\frac{2}{3}$ of the length of BC. The length of CD is $\frac{1}{2}$ the length of AC. What fraction of the length of AD is BC?

Do not write in this column

Ans: _____ [4]

83

4

13 Zoe scored an average of 88 marks for her first 3 tests out of a total of 5 tests. If she wants to score an average of 91 for 5 tests, find the least **average score** she needs to score for her next 2 tests.

Do not write in this column

Ans: _____[4]

14 Lily had twice as much money as Devi. After Lily had spent $\frac{1}{3}$ of her money and Devi spent $\frac{2}{9}$ of her money, Lily had $200 more than Devi.

(a) How much money did Devi have at first?
(b) How much money did Lily have left?

Ans: (a)_____ [2]

(b)_____ [2]

9

15 A shopkeeper received $90 from the sale of 5 shirts, 3 belts and 1 bag. He sold 1 belt and 1 bag for $29. He also sold 1 shirt and 1 belt for $17. How much did he sell one belt for?

Do not write in this column

Ans: _____ [4]

4

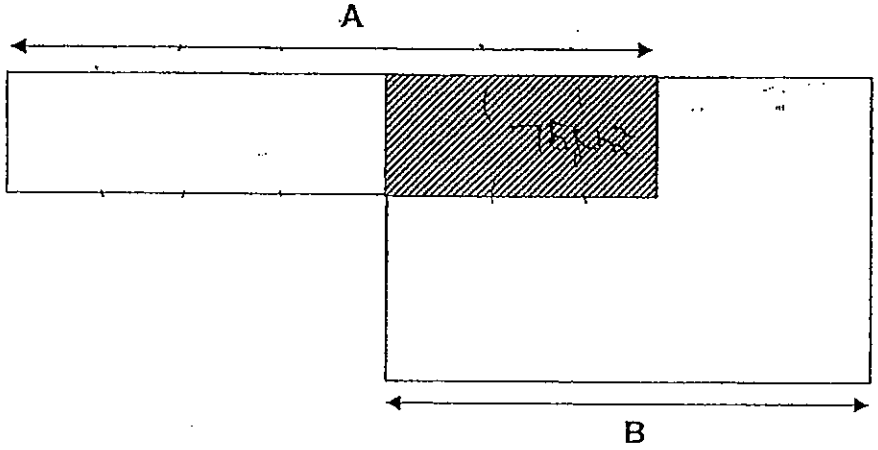
85

16 The figure below, not drawn to scale, shows 2 overlapping rectangles, Rectangle A and Rectangle B. $\frac{3}{7}$ of Rectangle A and $\frac{1}{5}$ of Rectangle B are shaded.

Do not write this column

(a) What is the ratio of the unshaded part of Rectangle A to the unshaded part of Rectangle B? (Give your answer in simplest form)

(b) If the shaded area is 75 cm^2, what is the area of the unshaded part of the whole figure?



Ans: (a)_____ [2]

(b)_____ [2]

4

17 Study the following patterns that are made up of tiles.

Do not write in this column

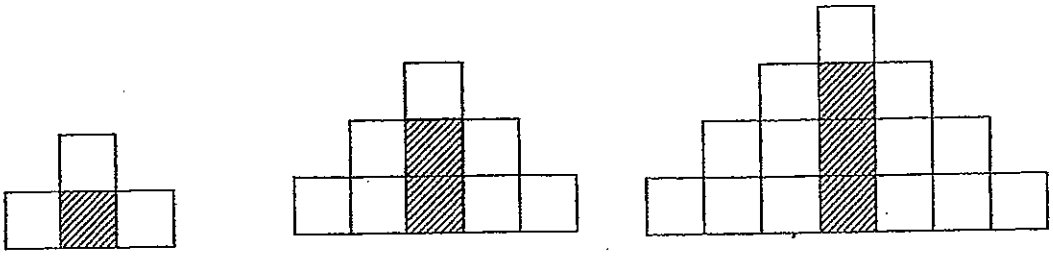


Figure 1 Figure 2 Figure 3

(a) How many tiles are needed to form Figure 4?

(b) Which figure number needs 121 tiles to make?

(c) What is the total number of shaded tiles needed to form the first 15 figures?

Answer: (a) _____ [1]

Answer: (b) _____ [2]

Answer: (c) _____ [2]

5

87

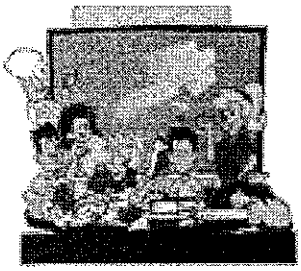
18 There were 121 animals in a farm. $\frac{8}{9}$ of the cows and $\frac{4}{5}$ of the ducks were sold. In all, 104 animals were sold. How many ducks were there in the farm at first?

Do not write in this column

Ans: _____ [5]

5

End of Paper
--- CHECK YOUR WORK CAREFULLY ---



Answer Sheets

EXAM PAPER 2012

SCHOOL : SCGS
SUBJECT : PRIMARY 5 MATHEMATICS

TERM : SA1

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

16)300 **17)31/200** **18)139** **19)3.4** **20)16**

21)3.805 **22)44m** **23)$192** **24)38cm** **25)1/12**

26)6m + 2m = 8m
56m÷8m = 7m
7m – 2m = 5m

27)1/6→$60
6/6→$60 x 6 = $360
$360 – $60 = $300
1/3→$300÷3 = $100
Spent→$60 + $100 = $160
Left→$360 – $160 = $200

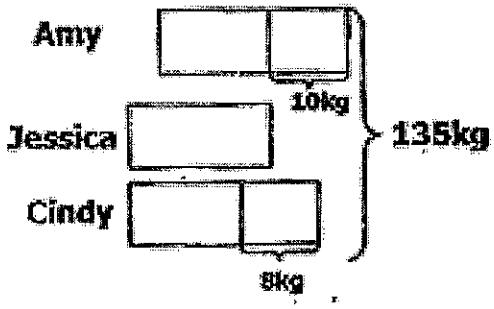
28)4822

29)6u + 10u = 16u
16u→240
u→240÷16 = 15
7u→15 x 7 = 105

30)1kg of grapes→$5.40
½kg of grapes→$2.70
2kg of grapes→$5.40 x 2 = $10.80
½ kg of grapes→$5.40÷2 = $2.70
$10.80 + $2.70 = $13.50

Paper 2

1)Average→45kg
Total→45kg x 3 = 135kg



10kg + 8kg = 18kg
135kg − 18kg = 117kg
3u→117kg
1u→117kg÷3 = 39kg
Jessica→39kg

2)At first: spent
5 fifty-cent→5 x $0.50 = $2.50 $3.80
9 ten-cent→9 x $0.10 = $0.90
3 one dollar→3 x $1 = $3
Altogether→$2.50 + $0.90 + $3 = $6.40
Left:
$6.40 − $3.85 = $2.55

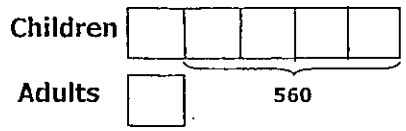
3)4 minutes→1 present
1 hour→60min
½hour→30min
88 minutes→22presnets

4)12÷4 = 3
3 x 3 = 9

5)Length→2m
Breadth→1⅝m
Area→2m x 1⅝m = 3¼m^2
3¼m^2 = 3.25m^2
3.25m^2 ≈ 3.3m^2)

6)June and July→3/9
September and December→2/9
3/9 + 2/9 = 5/9
9/9 – 5/9 = 4/9
January, February, March, April, May, August, October, November→4/9
4/9→8
1/9→8÷4 = 2
1 x 8 = 8
9/9→2 x 9 = 18 pupils

7)<u>In the end</u>



4u→560
1u→560÷4 = 140
Adults→140
Children→140 x 5 = 700

<u>At first</u>
Adults→30
Children→870

<u>Left the party midway</u>
Adults→310 – 140 = 170
Children→870 – 700 = 170 adults

8)1u→8
Karen→8
Mr Heng→8 x 4 = 32
Wife→32 – 3 = 29

<u>3 years' time</u>
Karen→8 + 3 = 11
Mr Heng→32 + 3 = 35
Wife→29 + 3 = 32
Altogether→11 + 35 + 32 = 78 years

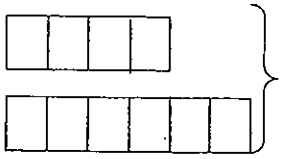
9)0.75 = ¾
0.5 = ½ = 2/4
Tank + ¾ = 9kg
Tank + 2/4 = 7kg
¾ - 2/4 = ¼
¼→9kg – 7kg = 2kg
¾→2kg x 3 = 6kg
Tank→9kg – 6kg = 3kg

10)2011→3600
2010→3600÷2= 1800
2009→1800÷2 = 900
2008→900÷2 = 450
2007→450÷2 = 225
Ans: 2007

11)<u>At first</u>
Boys→40
Girls→40 x 3 = 120

<u>After the interval</u>
Boys→40 – 5 = 35
Girls→120 + 20 = 140

Girls : Boys + Girls
140 : 35 + 140
140 : 175
4 : 5

12)AB
BC

4u + 6u = 10u

CD→10u÷2 = 5u
AD→4u + 6u + 5u = 15u
BC/AD = 6/15 = 2/5

13)88 x 3 = 264
91 x 5 = 455
455 – 264 = 191
191÷2 = 95.5

14)12u – 7u = 5u
5u→$200
1u→$200÷5 = $40
a)9u→$40 x 9 = $360
b)6u→$40 x 6 = $240
$720 – $240 = $480

15)5 shirts + 3 Belts + 1 Bag = $90
1 Belt + 1 Bag = $29
1 shirt + 1 Belt = $17
1 shirt + 1Belt = $17

$39 + $17 + $17 = $63
$90 – $63 = $27
3 shirts→$27
1 shirt→$27÷3 = $9
1 Belt→$17 – $9 = $8

16)a)3/7 = 1/5
3/7 = 3/15
Unshaded A : Unshaded B
4 : 12
1 : 3

b)3u→75cm$_2$
1u→75cm$_2$÷3 = 25cm$_2$
16u→25cm$_2$ x 16 = 400cm$_2$

17)a)1→4 + 5 b)10 c)120
2→9 + 7
3→16
4→25

18)8/9 cows + 4/5 Ducks→sold
9/9 – 8/9 = 1/9
5/5 – 4/5 = 1/5
1/9 cows + 1/5 ducks→left
Sold→104
Left→121 – 104 = 17
1/9 cows + 1/5 ducks→17
5/9 cows + 5/5 ducks→17 x 5 = 85
9/9 – 5/9 = 4/9
4/9 cows→121 – 85 = 36
1/9 cows→36÷4 = 9
9/9 cows→9 x 9 = 81
Ducks→121 – 81 = 40 ducks