

NANYANG PRIMARY SCHOOL
SECOND CONTINUAL EXAMINATION
2010

PRIMARY 5
MATHEMATICS
PAPER 1

DURATION: 50 MINUTES

Booklet A	/ 20
Booklet B	/ 20

Paper 1 Total:
/ 40

Name: _____ ()

Class: Primary 5 ()

Date: 25 August 2010

Parent's Signature: _____

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.

PAPER 1 (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 oval (1, 2, 3 or 4) on the Optical Answer Sheet.

(20 marks)

1 What is the value of $4 + 8 \times 5 - (16 - 4 \div 2)$?

(1) 30

(2) 36

(3) 38

(4) 54

2 Find the value of $4.1 \div 100$.

(1) 0.041

(2) 0.41

(3) 41

(4) 410

3 A piece of ribbon was 3.65 m long. It was cut into 2 pieces such that the longer piece was twice the length of the shorter piece. What was the length of the longer piece? Give your answer correct to 2 decimal places.

(1) 1.22 m

(2) 1.65 m

(3) 1.83 m

(4) 2.43 m

4 Jason had 12 identical bottles, each completely filled with 250 ml of water. He poured the water from all the bottles into a tank. What was the capacity of the tank if the tank was only $\frac{1}{4}$ full after all the water was poured in?

(1) 6 l

(2) 9 l

(3) 3 l

(4) 12 l

- 5 What is the missing number in the box below?

$$3 : 15 = 1 : \boxed{?}$$

- (1) 5
- (2) 15
- (3) 3
- (4) 18
- 6 The length of each side of Square A and Square B is 3 cm and 5 cm respectively. Find the ratio of the area of Square B to the area of Square A.
- (1) 3 : 5
- (2) 5 : 3
- (3) 9 : 25
- (4) 25 : 9
- 7 Meiling had 4 fish with a total mass of 3.5 kg. The average mass of 3 of them was 0.92 kg. What was the mass of the fourth fish?
- (1) 0.74 kg
- (2) 0.875 kg
- (3) 2.58 kg
- (4) 2.76 kg

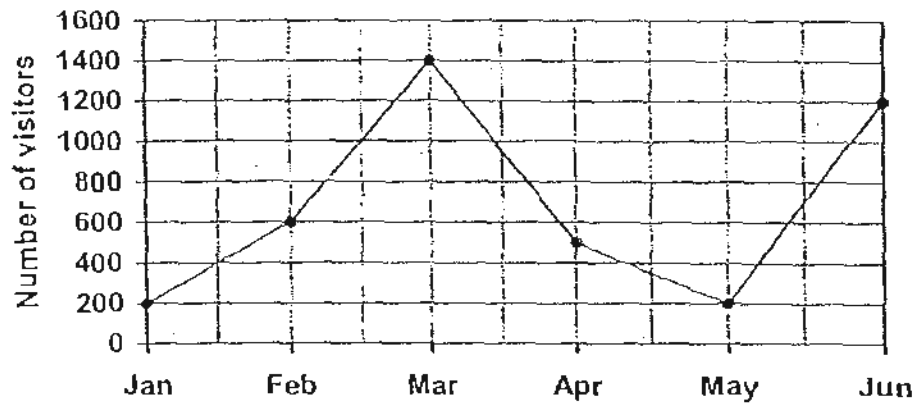
- 8 Mrs Wong wanted to buy some paperclips for her class of 39 pupils. If each pupil were to receive 14 paperclips, how many paperclips would she have to buy?

- (1) 53
- (2) 195
- (3) 516
- (4) 546

- 9 Some pupils visited the Science Centre. They spent $1\frac{1}{2}$ h doing experiments in the laboratory, and $2\frac{1}{4}$ h exploring the different stations in the Science Centre. How much time did they spend at the Science Centre?

- (1) $\frac{3}{4}$ h
- (2) $2\frac{3}{4}$ h
- (3) $3\frac{1}{3}$ h
- (4) $3\frac{3}{4}$ h

10. The line graph shows the total number of visitors to a library in the first 6 months of the year. The number of visitors were recorded on the first day of each month.



In which month did the number of visitors increase the most?

- (1) Jan
 - (2) Feb
 - (3) Mar
 - (4) May
11. Which one of the following fractions is arranged in descending order?

(1) $\frac{8}{15}, \frac{5}{9}, \frac{4}{7}, \frac{10}{13}$

(2) $\frac{4}{7}, \frac{5}{9}, \frac{8}{15}, \frac{10}{13}$

(3) $\frac{10}{13}, \frac{8}{15}, \frac{5}{9}, \frac{4}{7}$

(4) $\frac{10}{13}, \frac{4}{7}, \frac{5}{9}, \frac{8}{15}$

- 12 Devi and her sister paired up as a team in a race. After Devi ran $\frac{5}{12}$ of the race, her sister continued the rest of the race. If Devi's sister ran $\frac{1}{2}$ of the remaining journey and had another $1\frac{3}{4}$ km left to complete the race, what was the total distance of the race?

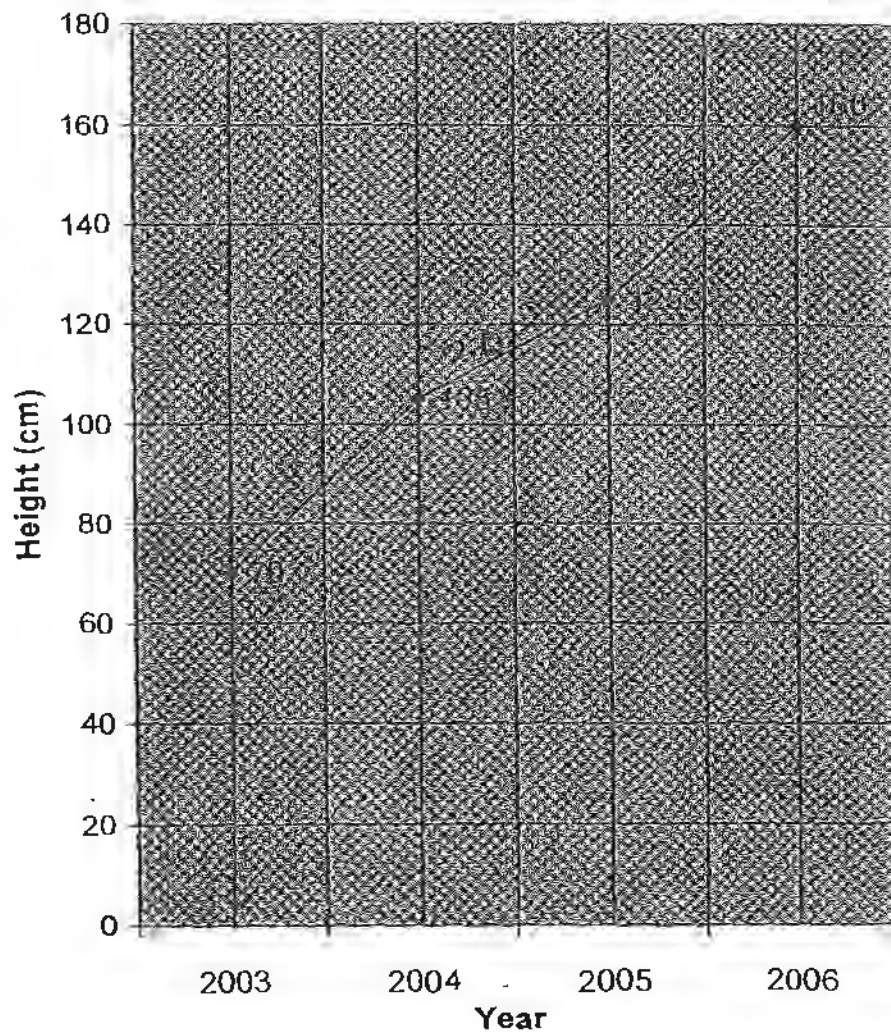
- (1) $2\frac{2}{3}$ km
- (2) 6 km
- (3) $8\frac{2}{5}$ km
- (4) 21 km

- 13 The average rainfall for the months from January to May was 155 mm. Each month from January to May, the rainfall was 1 mm more than the month before it. What was the rainfall in January?

- (1) 153 mm
- (2) 155 mm
- (3) 156 mm
- (4) 157 mm

- 14 The line graph below shows the height of a plant measured in January of each year from 2003 to 2006.

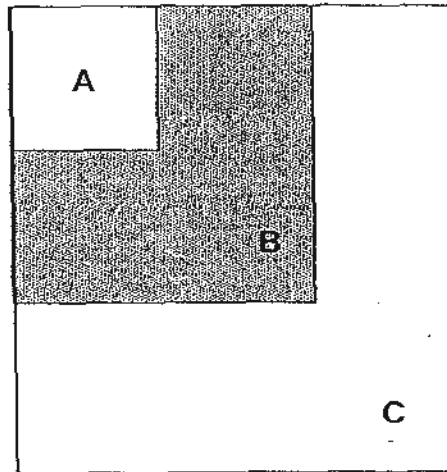
Height of the Plant



What was the average increase per year of the plant's height from 2003 to 2006?

- (1) 30 cm
- (2) 55 cm
- (3) 90 cm
- (4) 115 cm

- 15 The figure is made up of three squares, A, B and C overlapping each other. The area of square A is 20% of the area of Square B and the area of Square B is 60% that of the area of Square C.



What percentage of the figure is shaded?

- (1) 12%
- (2) 20%
- (3) 40%
- (4) 48%

Name: _____ () Class: Pr 5 ()

P5 CA2 2010

PAPER 1 (BOOKLET B)

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 Town A has a population of 129 569.
Round off this number to the nearest thousand.

Ans: _____

-
- 17 Find the value of 340×50 .

Ans: _____

-
- 18 Larry bought a hi-fi set and a television set for \$1245 and \$3568 respectively. Estimate the total amount Larry had paid for both items, by first rounding off each amount to the nearest hundred dollars.

Ans: \$ _____

19 Express 1.65 as a fraction in its simplest form.

Ans: _____

20 Find the value of $\frac{3}{7} \times \frac{14}{15}$. Leave your answer in its simplest form.

Ans: _____

21 Kathy and 3 other girls were given a bag of sweets. They took $\frac{8}{9}$ of the sweets out from the bag and shared them equally. What fraction of the bag of sweets did each of them get?

Ans: _____

22 Find the ratio of 20 minutes to 1.5 hour. Leave your answer in its simplest form.

Ans: _____

- 23 The ratio of Sammy's age to Peter's age is 10 : 7. In 8 years' time, the ratio will become 4 : 3. What is Sammy's age now?

Ans: _____

- 24 Mrs Zhang used 2.8 kg of flour to bake 3 identical strawberry cakes. How much flour was used to bake each strawberry cake? Give your answer correct to 2 decimal places.

Ans: _____ kg

- 25 There were 875 members in a community club. 350 of them were female members. How many percent ^{what is the} more male members ~~than and~~ female members ~~were there?~~

Ans: _____

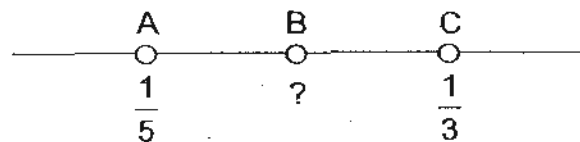
Questions 26 to 30 carry 2 marks each. Show your working clearly in the space provided for each question and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

- 26 The mass of a jar when it was $\frac{1}{4}$ filled with marbles was $1\frac{5}{8}$ kg. Its mass was $2\frac{1}{2}$ kg when it was $\frac{1}{2}$ filled with marbles. What was the mass of the empty jar?

Ans: _____ kg

- 27 In the number line below, A represents $\frac{1}{5}$, C represents $\frac{1}{3}$ and $AB = BC$.



What is the fraction represented by B?

Ans: _____

- 28 The average mass of a group of pupils was 28 kg. When Mr Lim measured and recorded the mass of these pupils, he wrongly recorded one pupil's weight as 53 kg when it should be 35 kg. As a result, the average weight of the pupils was recorded as 29 kg. How many pupils were there?

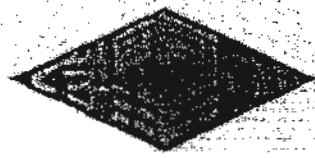
Ans: _____

- 29 Mrs Tan's monthly salary was \$1200. She spent \$480 of it on clothing and $\frac{1}{2}$ of the remainder on food. What percentage of the salary was spent on food?

Ans: _____%

- 30 Between the numbers 10 and 100, how many times did the digit '9' appear?

Ans: _____



NANYANG PRIMARY SCHOOL
SECOND CONTINUAL EXAMINATION
2010

PRIMARY 5
MATHEMATICS
PAPER 2

DURATION: 1 HOUR 40 MINUTES

Paper 2 Total	/ 60
GRAND TOTAL	/ 100

Name: _____ ()

Class: Primary 5 ()

Date: 25 August 2010

Parent's Signature: _____

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PAPER 2

Questions 1 to 5 carry 2 marks each. Show your working 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.

(10 marks)

-
- 1 Mingwei was twice as heavy as Guowei. After Mingwei lost 13 kg, he was still 26 kg heavier than Guowei. What was Mingwei's mass after he had lost weight?

Ans: _____ kg

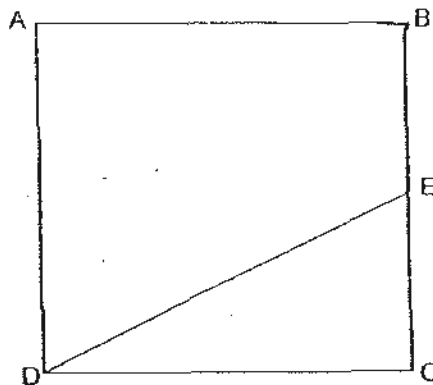
-
- 2 The cost of petrol was \$2 per litre. What was the cost of $2\frac{1}{4}$ l of petrol?

Ans: \$ _____

- 3 The ratio of the number of stamps Keegan had to the number of stamps Liling had was $1 : 3$ at first. After Keegan's father gave him another 12 stamps, they then had the same number of stamps. Later, Liling bought another 2 more stamps. What was the ratio of the number of stamps Keegan had to the number of stamps Liling had in the end? Express your answer in its simplest form.

Ans: _____

- 4 The figure below is made up of a square $ABCD$ and a triangle CDE . Given that $BE = EC$, find the ratio of the area of the triangle CDE to the area of the square $ABCD$.



Ans: _____

- 5 Mrs Lum bought 300 mangoes. She sold 60% of the mangoes at \$1.50 each and the remaining mangoes at a discount. She collected a total of \$420 from the sale of all the mangoes. What was the discounted price of each mango?

Ans: \$ _____

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 Kaiti and Isa baked some muffins in the ratio 2 : 3. The number of muffins Sally baked was one third of the number of muffins Kaiti baked. If Isa baked 36 muffins, how many muffins did Sally bake?

Ans: _____ [3]

- 7 The total capacity of 2 identical flasks is the same as the total capacity of 5 identical glasses. If 5.5 l of water are needed to fill 4 such flasks and 12 such glasses, what is the capacity of one glass? Give your answer in *ml*.

Ans: _____ [3]

- 8 Osman spent $\frac{3}{5}$ of his pocket money on a bowl of noodles. Then he spent $\frac{2}{5}$ of his remaining pocket money on a glass of orange squash.
- (a) What fraction of his pocket money did he spend on the glass of orange squash?
- (b) If he had \$1.20 left in the end, how much money did he spend on the noodles?

Ans: (a) _____ [1]

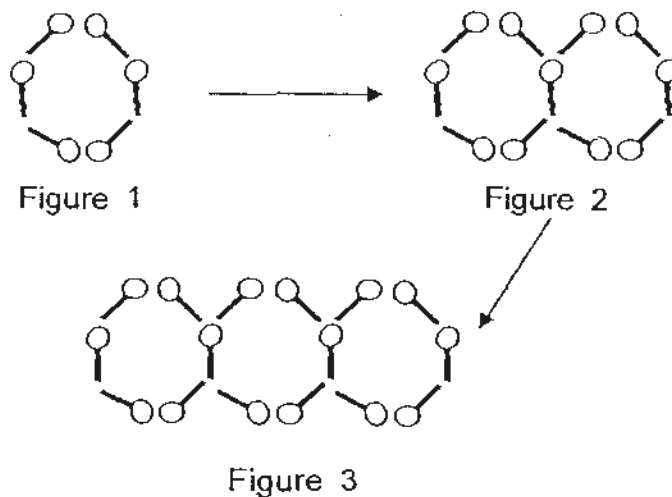
(b) _____ [2]

- 9 Before a game, Azmi and Peiqin had the same of number of picture cards. During the first round, Azmi lost 12 of his picture cards to Peiqin. During the second round, Peiqin won 16 picture cards from Azmi. In the end, Peiqin had 3 times as many picture cards as Azmi.
- (a) How many **more** picture cards did Peiqin have in the end?
- (b) How many picture cards did both of them have in all?

Ans: (a) _____ [2]

(b) _____ [1]

- 10 Carol used 6 lollipops to form a 6-sided figure as shown in Figure 1. Five more lollipops were added to make 2 six-sided figures as shown in Figure 2. She continued adding lollipops to form another six-sided figure as shown in Figure 3.



- (a) How many 6-sided figures were there if 31 lollipops were used?
- (b) How many lollipops were used in Figure 101?

Ans: (a) _____ [2]

(b) _____ [1]

- 11 Suri needed to buy 72 tickets for some tourists. For every 10 tickets purchased, a 15% discount will be given for the 10th ticket. If each ticket cost \$9, how much did she have to pay for the tickets?

Ans: _____ [4]

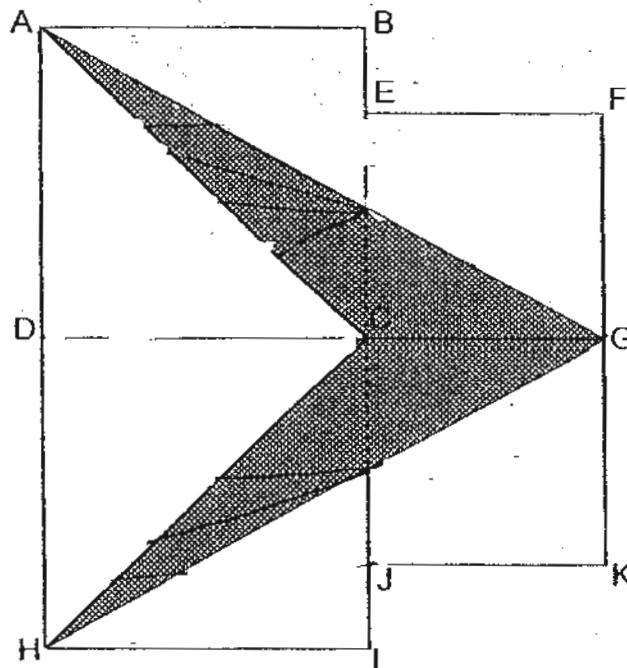
- 12 The ratio of the amount of money Jenny had to the amount of money Siti had was 3 : 4. The next day, their parent gave each of them some money. Siti received twice as much as Jenny. The ratio then became 5 : 8. If both girls had a total \$70 at first, how much did Siti receive?

Ans: _____ [4]

- 13 The figure below is made up of two pairs of identical squares of different sizes. DCG is a straight line. The sum of the area of 1 big square and 1 small square is 52 cm^2 .

(a) What is the area of the shaded portion?

(b) What is the ratio of the area of $\triangle AHC$ to the area of $\triangle ACG$?



Ans: (a) _____ [3]

(b) _____ [1]

14 Ryan, Shaun and Raymond decided to pool some money to buy a present. Ryan agreed to contribute 30% of the cost of the present while Shaun agreed to pay 40% of the remaining amount. The remaining cost of the present will be paid by Raymond. However, when the 3 of them went to the shop, the price of the item had increased due to the inclusion of 7% GST. As a result, Ryan paid \$64.20 for his share.

(a) What was the price of the present before GST?

(b) How much did Raymond pay for the present, including GST?

Ans: (a) _____ [2]

(b) _____ [2]

- 15 There were $\frac{2}{9}$ as many red beads as blue beads in a bag. When some blue beads were taken out and an equal number of red beads were added into the bag, the number of red beads became $\frac{1}{4}$ of the total number of beads in the bag. If there were 176 beads in the bag at first, how many blue beads were taken out from the bag?

Ans: _____ [4]

- 16 Mr Tan had some oranges for sale. The first customer bought $\frac{1}{2}$ of the oranges and received 8 oranges free. The second customer bought 45% of the remaining oranges and received 5 oranges free. The third customer bought 70% of the remaining oranges and received 3 oranges free. Mr Tan then had 1 dozen oranges left. How many oranges did he have at first?

Ans: _____ [5]

17 A box containing 3 identical encyclopedias weighed 10.2 kg. Later, Mohammad added 2 more such encyclopedias and 3 identical files into the box, the mass of the box with its contents became 19 kg. If the mass of each encyclopedia was four times the mass of each file,

- (a) find the mass of the box. Express your answer in kg.
- (b) Mohammad could only lift a maximum mass of 13 kg. What is the minimum number of encyclopaedias he must remove from the box such that he is able to lift the box?

Ans: (a) _____ [3]

(b) _____ [2]

- 18 In a Mathematics quiz, pupils who answered each question correctly will be awarded some points according to the topic related as shown in the table below:

Topics	Points Awarded
Fractions	3 points
Geometry	4 points
Volume	5 points
Percentage	6 points

The number of questions on Fractions, Geometry, Volume and Percentage were in the ratio 5 : 4 : 3 : 2 respectively. Weiling answered all the quiz questions on Fractions and Geometry correctly, but she had got only $\frac{1}{3}$ of the questions on Volume correct and scored 0 for questions on Percentage. If Weiling scored 108 points for her quiz,

- (a) how many questions on Percentage were there in the quiz?
(b) How many questions were there in the quiz?

Ans: (a) _____ [3]

(b) _____ [2]

END OF PAPER

Setters: Ms Mavis Tan
Mdm Serene Leong



ANSWER SHEET

EXAM PAPER 2010

SCHOOL : NANYANG PRIMARY
 SUBJECT : PRIMARY 5 MATHEMATICS

TERM : CA2

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

- | | | | | |
|-------------------|--------------------|-----------|----------------------|-------------------|
| 16)130000 | 17)17000 | 18)\$4800 | 19) $1\frac{13}{20}$ | 20) $\frac{2}{5}$ |
| 21) $\frac{2}{9}$ | 22)2:9 | 23)40 | 24)0.93kg | 25)20% |
| 26)6/8kg | 27) $\frac{4}{15}$ | 28)18 | 29)30% | 30)19 |

Paper 2

- | | | | | |
|-------------|-------------------|------------------------------|-------------------------|-----------------|
| 1)65kg | 2)\$4.50 | 3)9:10 | 4)1:4 | 5)\$1.25 |
| 6)8 | 7)250ml | 8)a) $\frac{4}{25}$
b)\$3 | 9)a)28
b)112 | 10)a)6
b)506 |
| 11)\$638.55 | 12)\$40 | 13)a)24
b)3:1 | 14)a)\$200
b)\$89.88 | 15)12 |
| 16)216 | 17)a)0.6kg
b)2 | 18)a)6
b)42 | | |