

NANYANG PRIMARY SCHOOL
FIRST CONTINUAL EXAMINATION
2016

PRIMARY 6
MATHEMATICS
PAPER 1

DURATION: 50 MINUTES

Booklet A	/ 20
Booklet B	/ 20

Paper 1 Total:
/ 40

Name: _____ ()

Class: Primary 6 ()

Date: 3 March 2016

Any query on marks awarded should be raised by 11 March. We seek your understanding in this matter as any delay in the confirmation of marks will lead to delays in the generation of results.

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 Simplify $8a + 17 - 3a - 12$.

(1) $5a - 5$

(2) $5a + 5$

(3) $5a + 29$

(4) $11a + 5$

2 What is the value of $200 \div 2000$?

(1) 1

(2) 0.1

(3) 0.01

(4) 0.001

3 What is the value of $49 - 9 \times 2 + (16 + 24 + 8)$?

(1) 36

(2) 47

(3) 50

(4) 85

4 Which one of the following fractions is an equivalent fraction of $\frac{8}{6}$?

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

(2) $\frac{10}{8}$

(3) $\frac{12}{9}$

(4) $\frac{15}{10}$

5 Find the value of $\frac{2}{5} - \frac{1}{3}$.

(1) $\frac{1}{15}$

(2) $\frac{3}{8}$

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

(4) $\frac{11}{15}$

6 Find the value of $\frac{5}{9} \times 4$.

(1) $\frac{5}{36}$

(2) $\frac{9}{20}$

(3) $\frac{36}{5}$

(4) $\frac{20}{9}$

7 Find the value of $60.9 - 4.38$.

- (1) 55.62
- (2) 56.52
- (3) 56.68
- (4) 65.28

8 Express \$28 as a percentage of \$7000.

- (1) 0.004 %
- (2) 0.04 %
- (3) 0.4 %
- (4) 4 %

9 Find the average of the following numbers.

45 , 0 , 45 , 38 , 12

- (1) 28
- (2) 35
- (3) 38
- (4) 45

- 10 A bottle contained $\frac{2}{9}$ litre of syrup. All the syrup was poured equally into 3 empty cups. How much syrup was there in each cup?

(1) $\frac{2}{27}$ litre

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

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

(4) $3\frac{2}{9}$ litres

- 11 Find the value of $16 \div 40 \times 200$.

(1) 0.002

(2) 0.008

(3) 20

(4) 80

- 12 The table below shows the marks obtained by 4 pupils in Test 1 and 2.

Name	Test 1	Test 2
Tarita	80	92
Gwen	80	68
Olivia	80	60
Si Hui	80	100

Which pupil has her marks increased by 25% in Test 2 as compared to Test 1?

- (1) Tarita
 - (2) Gwen
 - (3) Olivia
 - (4) Si Hui
- 13 Nasreen and Kavita baked 4 cakes each. $1\frac{1}{12}$ kg of flour was used for baking each cake. What was the total mass of flour used by both girls?

- (1) $1\frac{1}{3}$ kg
- (2) $1\frac{2}{3}$ kg
- (3) $4\frac{1}{3}$ kg
- (4) $8\frac{2}{3}$ kg

- 14 Ronin bought 3 green and 6 red apples. The average mass of the 9 apples was 80 g. The average mass of the 3 green apples was 60 g. Find the total mass of the 6 red apples.

- (1) 20 g
- (2) 90 g
- (3) 540 g
- (4) 660 g

- 15 P and Q are whole numbers. P is the product of all the common factors of 12 and 20. Q is the first common multiple of 3 and 8. What is the value of $Q + P$?

- (1) 24
- (2) 12
- (3) 3
- (4) 8

Name: _____ () Class: Pr 6 ()

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 Find the value of $10m - \frac{4m}{2}$ when $m = 5$.

Ans: _____

17 Find the value of $99 \times 6 + 105 + 5$.

Ans: _____

18 Round off 49 985 to the nearest thousand.

Ans: _____

19 Find the value of $\frac{9}{10} \times \frac{5}{12}$.

Give your answer as a fraction in its simplest form.

Ans: _____

20 Find the value of $42 \div \frac{4}{7}$.

Give your answer as a mixed number in its simplest form.

Ans: _____

21 Which digit in 456.789 is in the tenths place?

Ans: _____

22 Find the value of $540.09 \div 3$.

Ans: _____

- 23 X is a whole number. 743 is added to X to get 5092. What is the value of X?

Ans: _____

- 24 There were 600 men and 200 women who took part in a marathon. What percentage of these participants were men?

Ans: _____ %

- 25 Samad bought a tank. 25% of the capacity of the tank is 350 cm³. What is the capacity of the tank?

Ans: _____ cm³

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 On a Sunday, Mrs Pang spent 50% of her time at home doing housework. She spent 20% of the remaining time at home baking a cake. She spent 5 h doing housework. How much time did she spend on baking the cake?

Ans: _____ h

- 27 A jug weighs $\frac{2}{3}$ as heavy as a tank. The tank weighs w kg heavier than the jug. What is the total mass of the jug and the tank in terms of w ?

Ans: _____ kg

- 28 The average mass of Darren and Elvin is 40 kg. The average mass of Darren and Fandi is 36 kg. Find the difference between the mass of Elvin and Fandi.

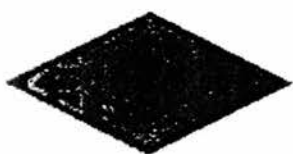
Ans: _____ kg

- 29 $\frac{2}{3}$ of a whole number is 20 more than $\frac{2}{5}$ of the same number. Find the number.

Ans: _____

- 30 One woman can peel 2 apples in 3 minutes. How many apples can 2 women peel in 30 minutes?

Ans: _____



NANYANG PRIMARY SCHOOL
FIRST CONTINUAL EXAMINATION
2016

PRIMARY 6
MATHEMATICS
PAPER 2

DURATION: 1 HOUR 40 MINUTES

Paper 2 Total	/ 60
GRAND TOTAL	/ 100

Name: _____ ()

Class: Primary 6 ()

Date: 3 March 2016

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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 The usual price of a pair of earrings was \$1000. Mrs Lee bought it at a discounted price of \$860. What was the percentage discount?

Ans: _____ %

-
- 2 Mr Lim sold $27\frac{1}{8}$ kg of meat on Monday. He sold $\frac{3}{4}$ kg less meat on Tuesday than on Monday. How many kilograms of meat did he sell on Tuesday?

Ans: _____ kg

-
- 3 Mei bought a ribbon that is 77 cm long. She cut the ribbon into two pieces such that the length of the longer piece is thrice the length of the shorter piece. Find the length of the shorter piece of ribbon.

Ans: _____ cm

- 4 A wall measured $\frac{36}{5}$ m by $\frac{15}{8}$ m. $\frac{2}{7}$ of the wall was painted yellow. Find the area of the wall that was painted yellow. Leave your answer as a mixed number.

Ans: _____ m²

- 5 Leroy has some chocolates. He can choose to give 3 chocolates to each friend and he will have 25 chocolates left. He can also choose to give 9 chocolates to each friend and he will have 1 chocolate left. How many friends does he have?

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 A group of 5 girls competed in a race. The time taken by each girl to complete the 200-metre race is shown in the table below.

Name of girl	Time taken (s)
Jaya	40.27
Kimberly	33.55
Lynn	38.18
Meera	30.96
Ning	32.14

- (a) Round off the time taken, in seconds, by the fastest girl to one decimal place.
- (b) Find the difference in the time taken by the girl who came in 3rd and the girl who came in 4th. Round off this difference to the nearest second.

Ans: (a) _____ [1]

(b) _____ [2]

7 3 erasers cost $\$2q$ and 4 pencils cost $\$4$ more than the cost of 3 erasers. Kumar bought 6 such erasers and 12 such pencils.

(a) If $q = 0.6$, what was the total cost of 3 such erasers and 4 such pencils?

(b) Express the total cost of 6 such erasers and 12 such pencils in terms of q .

Ans: (a) _____ [2]

(b) _____ [1]

8 Weiming had some pens. He paid an average of 160¢ for the pens. He then bought another pen from a stationery store for 240¢ and the average cost of all the pens became 180¢ . How many pens did he have at first?

Ans: _____ [3]

- 9 Mrs Tan bought an oven and was given a discount of 15%. Mr Wong bought the same type of oven but was given a discount of 29%. Mrs Tan paid \$147 more than Mr Wong. The original price of the ovens was the same. What was the original price of the oven?

Ans: _____ [3]

- 10 Cindy had a box of fruit. A box contained some apples, oranges and pears. There were twice as many oranges as pears. There were 25 pears. She removed 5 pears and some oranges from the box. The number of oranges remained twice as many as the pears. The number of apples became three times as many as the oranges. What was the total number of fruits in the box at first?

Ans: _____ [3]

- 11 Mrs Lim bought $5\frac{1}{2}$ kg of nuts. She gave $\frac{5}{6}$ of the nuts to her friends and packed the rest equally into as many small packets as possible. Each small packet contained $\frac{1}{8}$ kg of nuts. What was the mass of the nuts that was left unpacked?

Ans: _____ [4]

12 Mr Muthu worked 40 hours in a certain week and earned a sum of money. He gave the entire sum of money to his 15 grandchildren to share equally among themselves. One of the grandchildren bought a toy car which cost \$22.80 with his share of the money and had \$47.60 left.

(a) How much did each grandchild receive?

(b) Given that Mr Muthu was paid a fixed salary for each hour of work, how much was his hourly pay?

Ans: (a) _____ [1]

(b) _____ [3]

13 Nora bought some magnets and notebooks. She bought 2 more notebooks than magnets. However, she paid \$25.20 less for the notebooks than for the magnets. Each magnet cost \$2 more than each notebook. Each notebook cost \$2.40.

- (a) How many magnets did Nora buy?
- (b) How many notebooks did Nora buy?

Ans: (a) _____ [3]

(b) _____ [1]

- 14 At a fruit stall, Kim paid a total of \$21.20 for 600 g of cherries and 500 g of blueberries. Lee paid a total of \$9.20 for 200 g of cherries and 300 g of blueberries. Mel bought 300 g of cherries and 100 g of blueberries. How much did Mel pay?

Ans: _____ [4]

15 At first, the ratio of the number of men to the number of women in a fun fair was 4 : 5. When 36 women and some men joined in the fun fair, there was a 12% increase in the number of women and the total number of people was increased by 20%.

(a) How many men were there at first?

(b) What was the percentage increase in the number of men after 36 women and some men joined in the fun fair?

Ans: (a) _____ [2]

(b) _____ [2]

16 Mr Raj gave $\frac{2}{9}$ of his salary to his wife and paid \$1040 for the household bills. After he gave $\frac{3}{4}$ of the remaining salary to his five children to share equally, he had $\frac{1}{7}$ of his salary left.

- (a) Find Mr Raj's salary.
(b) Find the amount of money he had left.

Ans: (a) _____ [3]

(b) _____ [2]

- 17 Amy and Sofia had a total of 450 stamps. Amy gave 40% of her stamps to Sofia. Sofia then gave 25% of her total number of stamps to Amy. In the end, Amy had 270 stamps. How many stamps did Amy have at first?

Ans: _____ [5]

18 At a 2-day workshop, each participant was charged \$55 per day. On Day 1, the number of male participants was 60 fewer than the number of female participants. On Day 2, the number of female participants decreased by 20% while the male participants increased by 30%. There were 573 participants on Day 2.

- (a) How many participants attended the workshop on Day 1?
- (b) All participants were given a 10% discount. What was the total amount paid by all the participants on both days?

Ans: (a) _____ [3]

(b) _____ [2]

END OF PAPER

EXAM PAPER 2016

SCHOOL :NANYANG

SUBJECT :P6 MATHEMATICS

TERM : CA1

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

16)40

17)615

18)50000

19) $\frac{3}{8}$

20) $73\frac{1}{2}$

21)7

22)180.03

23)4349

24)75%

25)1400cm³

26)1h

27)5W kg

28)8kg

29)75

30)40

Paper 2

1) $\$1000 - \$860 = \$140$

$$\frac{\$140}{\$1000} \times 100\% = 14\%$$

2) $T \rightarrow 27\frac{1}{8} - \frac{3}{4} = 26\frac{3}{8} \text{ kg}$

3) $3 + 1 = 4$

$$77 \div 4 = 19.25 \text{ cm}$$

$$4) \text{Total} \rightarrow 36/5 \times 15/8 = 13\frac{1}{2}$$

$$\text{Yellow} \rightarrow 13\frac{1}{2} \times 2/7 = 3\frac{6}{7} \text{ m}_2$$

5) Friends : 1 2 3 4 5 6

$$3 : 3 \ 6 \ 9 \ 12 \ 15 \ 18$$

$$+25 \quad 28 \ 31 \ 34 \ \underline{37} \ 40 \ 43$$

$$9 : 9 \ 18 \ 27 \ 36 \ 45 \ 54$$

$$+1 \quad 10 \ 19 \ 28 \ \underline{37} \ 46 \ 55$$

Ans : 4

$$6) a) 30.96 \approx 31.0 \text{ seconds}$$

$$b) 38.18 - 33.55 = 4.63$$

$$4.63 \approx 5 \text{ seconds}$$

$$7) a) 3e \rightarrow \$2q$$

$$4p \rightarrow \$2q + \$4$$

$$3e + 4p \rightarrow \$2q + \$2q + \$4 = \$(4q+4)$$

$$\$0.60 \times 4 = \$2.40$$

$$\$2.40 + \$4 = \$6.40$$

$$b) 6e \rightarrow \$2q \times 2 = \$4q$$

$$12p \rightarrow (\$2q + \$4) \times 3 = \$(6q+12)$$

$$6e + 12p \rightarrow \$4q + \$6q + 12 = \$(10q+12)$$

$$8) 180c - 160c = 20c$$

$$240c - 180c = 60c$$

$$60c \div 20c = 3 \text{ pens}$$

9) Mr Tan (pay) $\rightarrow 100\% - 15\% = 85\%$

Mr Wong (pay) $\rightarrow 100\% - 29\% = 71\%$

$\$147 \rightarrow 85\% - 71\% = 14\%$

$1\% \rightarrow \$147 \div 14 = \10.50

$100\% \rightarrow \$10.50 \times 100 = \1050

10) Remaining (P) $\rightarrow 25 - 5 = 5$

Remaining (O) $\rightarrow 20 \times 2 = 40$

Apple $\rightarrow 40 \times 3 = 120$

Orange $\rightarrow 25 \times 2 = 50$

At first $\rightarrow 50 + 120 + 25 = 195$

11) $1 - 5/6 = 1/6$

$5\frac{1}{2} \times 1/6 = 11/12$

$11/12 \div 1/8 = 7\frac{1}{3}$

$1/8 \times 7 = 7/8$

$11/12 - 7/8 = 1/24$ kg

12)a) 1 share $\rightarrow \$22.80 + \$47.60 = \$70.40$

b) Total money $\rightarrow \$70.40 \times 15 = \1056

1h $\rightarrow 1056 \div 40 = \26.40

13) $N \rightarrow \$2.40$

$M \rightarrow \$2.40 + \$2 = \$4.40$

$\$25.20 + \$2.40 \times 2 = \$30$

$M \rightarrow \$30 \div \$2 = 15$

$N \rightarrow 15 + 2 = 17$

a) 15 magnets. b) 17 notebooks.

14) $600\text{g C} + 500\text{g B} \rightarrow \21.20

$200\text{g C} + 300\text{g B} \rightarrow \9.20

$600\text{g C} + 900\text{g B} \rightarrow \$9.20 \times 3 = \$27.60$

$400\text{g B} \rightarrow \$27.60 - \$21.20 = \6.40

$100\text{g B} \rightarrow \$6.40 \div 4 = \$1.60$

$\$1.60 \times 3 = \4.80

$200\text{g C} \rightarrow \$9.20 - \$4.80 = \4.40

$100\text{g C} \rightarrow \$4.40 \div 2 = \$2.20$

$300\text{g C} \rightarrow \$2.20 \times 3 = \$6.60$

$300\text{g C} + 100\text{g B} \rightarrow \$6.60 + \$1.60 = \8.20

15) a) $100\% + 12\% = 112\%$

$36W \rightarrow 12\% \text{ of } W$

$100\% \text{ of } W \rightarrow 26/12 \times 100 = 300$

$300 \div 5 = 60$

(at first) $\rightarrow 60 \times 4 = 240 \text{ men}$

15)b) Total (at first) $\rightarrow 300 + 240 = 540$

$540/100 \times 20 = 108$

Men (join) $\rightarrow 108 - 36 = 72$

$72/240 \times 100\% = 30\%$

16) $\frac{1}{4}$ of remaining = $\frac{1}{7}$ salary

$\frac{4}{4}$ of remaining = $\frac{4}{7}$ of salary

$\frac{4}{7} = \frac{36}{63}$

$\frac{2}{9} = \frac{14}{63}$

$\$1040 \rightarrow 1 - \frac{36}{63} - \frac{14}{63} = \frac{13}{63}$

$\frac{1}{63} \rightarrow \$1040 \div 13 = \$80$

a) Salary $\rightarrow \$80 \times 63 = \5040

b) left $\rightarrow \$5040 \div 7 = \720

17) S (end) $\rightarrow 540 - 270 = 180$

$100\% - 25\% = 75\%$

$180/75 \times 100 = 240$

$240/100 \times 25 = 60$

$270 - 60 = 210$

$100\% - 40\% = 60\%$

$210/60 \times 100 = 350$ stamps.

$$18) 60/100 \times 20 = 12$$

$$60 - 12 = 48$$

$$573 - 48 = 525$$

$$10 - 2 = 8$$

$$10 + 3 = 13$$

$$13 + 8 = 21$$

$$525 \div 21 = 25$$

$$10 + 10 = 20$$

$$25 \times 20 = 500$$

$$\text{Day 1} \rightarrow 500 + 60 = 560$$

$$100\% - 10\% = 90\%$$

$$\text{After dis} \rightarrow \$55/100 \times 90 = \$49.50$$

$$\text{Day 1,2} \rightarrow 560 + 573 = 1133$$

$$\$49.50 \times 1133 = \$56083.50$$

Ans : a) 560

b) \$56083.50