FIRST CONTINUAL EXAMINATION
2017

PRIMARY 6

MATHEMATICS

PAPER 1

DURATION: 50 MINUTES

Booklet A	**/ 20**
Booklet B	**/ 20**

Paper 1 Total: / 40

Name: _____ ( )

Class: Primary 6 ( )

Date: 27 February 2017

Any query on marks awarded should be raised by 9 March 2017. 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: _____

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ANSWER ALL QUESTIONS.

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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)

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1 Find the value of $16.4 - 7.16$.

(1) 8.88

(2) 9.24

(3) 9.36

(4) 23.56

2 Find the value of $24 + 21 \div (7 - 4) \times 5$.

(1) 59

(2) 75

(3) 3

(4) 155

3 How many thousands are there in the product of 7000 and 40?

(1) 28 000

(2) 2800

(3) 280

(4) 28

4 Find the value of $\frac{3}{5} + \frac{6}{7}$.

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

(2) $\frac{18}{35}$

(3) $1\frac{16}{35}$

(4) $1\frac{26}{35}$

5 Find the value of $\frac{7}{4} \times 14$.

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

(2) $15\frac{3}{4}$

(3) $19\frac{1}{2}$

(4) $24\frac{1}{2}$

6 Which one of the following fractions is not an equivalent fraction of $\frac{4}{10}$?

(1) $\frac{6}{15}$

(2) $\frac{10}{25}$

(3) $\frac{14}{30}$

(4) $\frac{16}{40}$

7 Simplify the following algebraic expression.

$$8 + 3k \times 6 - 1$$

(1) $65k$

(2) $8 + 15k$

(3) $18k + 7$

(4) $18k - 7$

8 The total mass of 3 pears is 300 g and the total mass of 5 apples is 700 g. What is the average mass of the fruits?

(1) 120 g

(2) 125 g

(3) 240 g

(4) 500 g

9 In a class of 40 pupils, 30 of them were girls. What percentage of the class were girls?

(1) 25%

(2) 30%

(3) 40%

(4) 75%

10 A nylon rope is $\frac{6}{7}$ m long. It is cut into 12 equal pieces. What is the length of each piece?

(1) $\frac{1}{14}$ m

(2) $\frac{3}{37}$ m

(3) $10\frac{2}{7}$ m

(4) 14 m

11 The capacity of 40 identical cups is 12.08 *l*. What is the capacity of 1 such cup?

(1) 0.302 *l*

(2) 0.32 *l*

(3) 3.02 *l*

(4) 3.2 *l*

12 The average of two numbers is 530. One of the numbers is 250. Find the other number.

(1) 15

(2) 280

(3) 390

(4) 810

13 Arrange the following fractions from the largest to the smallest.

$$\frac{6}{5} \quad , \quad 1\frac{1}{4} \quad , \quad 1\frac{5}{6} \quad , \quad \frac{5}{3}$$

(1) $\frac{6}{5}$, $1\frac{1}{4}$, $\frac{5}{3}$, $1\frac{5}{6}$

(2) $1\frac{5}{6}$, $1\frac{1}{4}$, $\frac{6}{5}$, $\frac{5}{3}$

(3) $1\frac{5}{6}$, $\frac{6}{5}$, $1\frac{1}{4}$, $\frac{5}{3}$

(4) $1\frac{5}{6}$, $\frac{5}{3}$, $1\frac{1}{4}$, $\frac{6}{5}$

14 There were 16 tables in a room at first. 4 tables were then added into the room. Find the percentage increase in the number of tables in the room.

(1) 20%

(2) 25%

(3) 75%

(4) 125%

15 Nathan had 95 concert tickets. He gave 5 concert tickets to each of his friends and had 25 concert tickets left. How many friends did he give his concert tickets to?

(1) 14

(2) 19

(3) 24

(4) 70

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)

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16 Find the value of $\frac{5m+58}{4}$ when $m = 6$.

Ans: _____

---

17 Find the missing number in the box.

$\boxed{?} \div 4 - 16 = 64$

Ans: _____

---

18 Find the value of $40.56 \div 8$.

Ans: _____

---

19 Express 3021 thousandths as a decimal.

_____

---

20 Find the product of $\frac{5}{12}$ and $\frac{3}{10}$. Leave your answer in its simplest form.

Ans: _____

---

21 Find the value of $9 \div \frac{6}{7}$. Leave your answer as a mixed number in its simplest form.

Ans: _____

---

22 Happy Bakery sold 159 345 buns last month. Round off this number to the nearest hundred.

Ans: _____

---

23 Joseph completed a race in $1\frac{3}{4}$ min. He was 14 s faster than Ian. How long did Ian take to complete the race?

Ans: _____ s

---

24 Reuben and Jayson shared a total of 40 cookies. Jayson received 20% of the cookies. How many cookies did Jayson receive?

Ans: _____

---

25 After reading 60% of his storybook, Arif had 36 more pages to read. How many pages were there in the storybook?

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 Devi packed $\frac{2}{3}$ kg of salt into small packets. Each packet contained $\frac{1}{9}$ kg of salt. How many small packets of salt were there?

Ans: _____

---

27 The table below shows the marks Zhi Ming scored for various subjects in an examination. Each subject had a maximum score of 100 marks.

Subject	Marks
English	80
Chinese	75
Mathematics	90
Science	79

How many percent of the total marks did Zhi Ming score in the examination?

Ans: _____ %

---

28 The average of six numbers is 18. When a 7^{th} number is added, the total of the seven numbers becomes 118. What is the 7^{th} number?

Ans: _____

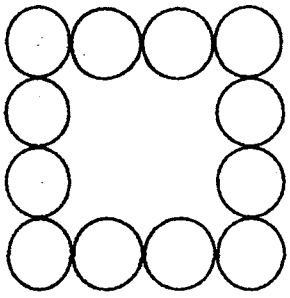
---

29 Yumin had $11h$ pens. She wanted to give her nephews 4 pens each, but found out that she was $2h$ pens short. Express the number of nephews Yumin had in terms of h.

Ans: _____

---

30 Michael has some fifty-cent coins. He uses 12 fifty-cent coins and arranges them to form the outline of a small square as shown in the figure below.



He uses 76 fifty-cent coins and arranges them in the same way to form the outline of another bigger square. Find the total value of the coins on one side of the bigger square.

Ans: $ _____

FIRST CONTINUAL EXAMINATION
2017

PRIMARY 6

MATHEMATICS

PAPER 2

DURATION: 1 HOUR 40 MINUTES

Paper 2 Total	**/ 60**
GRAND TOTAL	**/ 100**

Name: _____ ( )

Class: Primary 6 ( )

Date: 27 February 2017

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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)

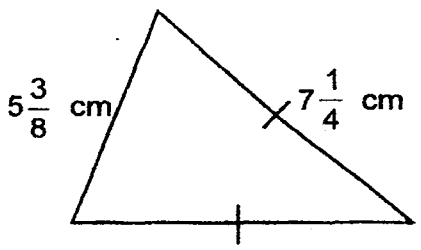
---

1 The mass of a cow is 354 kg. The cow is 8 times as heavy as a sheep. Find the mass of the sheep. Give your answer as a decimal in kilograms.

Ans: _____ kg

---

2 The figure below shows an isosceles triangle. Find its perimeter.



Ans: _____ cm

---

3 The price of a television set before GST was $2990. Mr Toh bought the television set and had to pay an additional 7% GST. What was the amount of GST he had to pay?

Ans: $_____

---

4 The average of five consecutive numbers is 700. Find the value of the smallest number.

Ans: _____

---

5 Peiqi had some cards. She could place them into sets of 4 cards or sets of 6 cards without leaving any remainder. When she placed them into sets of 7 cards instead, she needed one more card to make the last set of 7. What was the smallest possible number of cards she had?

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)

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6 Jingwei bought three fruits from the supermarket. The table below shows the mass of each fruit he bought.

Name of fruit	Mass
Watermelon	6.96 kg
Pineapple	0.82 kg
Papaya	2.85 kg

(a) Find the total mass of the three fruits he bought.

(b) Round off the mass of the watermelon, in kg, to 1 decimal place.

Ans: (a) _____ [2]

(b) _____ [1]

---

7 A rectangle has a length measuring $8\frac{3}{4}$ cm. Its breadth is $2\frac{1}{6}$ cm shorter than its length.

(a) Find the breadth of the rectangle.

(b) Find the area of the rectangle.

Ans: (a) _____ [1]

(b) _____ [2]

---

8 Lisa, Mei and Nurul shared $\$n$. Nurul received 4 times as much money as Lisa. Mei received \$24 less than Nurul.

(a) How much money did Lisa receive in terms of n?

(b) If n = 93, how much money did Lisa receive?

Ans: (a) _____ [2]

(b) _____ [1]

---

9 Mr Ong earns the same amount of money each month. In May, he spent $2000 and saved the rest. In June, he spent 10% more and the amount saved decreased by 25%.

(a) How much more did Mr Ong spend in June?

(b) How much does Mr Ong earn each month?

Ans: (a) _____ [1]

(b) _____ [2]

---

10 Coen has 252 candies, Devi has 304 candies and Rashid has 182 candies. What is the total number of candies that Rashid must receive from Coen and Devi so that each of them will have the same number of candies?

Ans: _____ [3]

---

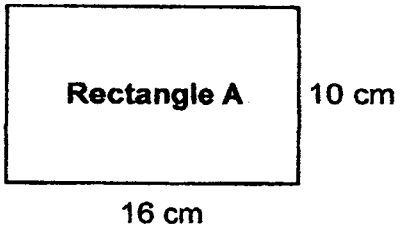
11 Tarts are sold in boxes of 4 tarts or in boxes of 12 tarts. Each box of 4 tarts is sold at $10.90 while each box of 12 tarts is sold at $32. Melissa has $250. How many tarts can she buy at most?

Ans: _____ [4]

12 Joyce and Kaylene had some stickers. The number of stickers Joyce had was $\frac{4}{5}$ of what Kaylene had. Joyce then gave $\frac{5}{8}$ of her stickers to Kaylene. As a result, Kaylene had 108 more stickers than Joyce. How many stickers did Joyce have at first?

Ans: _____ [4]

13 The figure below shows Rectangle A of length 16 cm and breadth 10 cm. The length of the rectangle is increased by 50% and its breadth is increased by 20% to form a new rectangle. What is the percentage increase in its area?



Ans: _____ [4]

14 Hassan bought some keychains and some magnets. Each keychain cost $2.65 and each magnet cost $3.35. Hassan bought 7 fewer magnets than keychains. He spent a total of $108.55. How many keychains and magnets did he buy altogether?

Ans: _____ [4]

15 A table is filled with numbers in a certain pattern.

	Column A	Column B	Column C	Column D
Row 1		4	8	12
Row 2	24	20	16	
Row 3		28	32	36
Row 4	48	44	40	
Row 5		52	56	60
Row 6	72	68	64	
⋮	⋮	⋮	⋮	⋮
Row 30	A	B	⋮	

(a) What number will appear in Row 30 Column A?

(b) What number will appear in Row 30 Column B?

(c) In which row will the number 1088 appear?

Ans: (a) _____ [1]

(b) _____ [1]

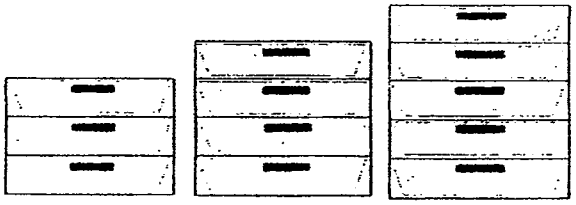
(c) _____ [2]

16 Toyoyo Shop sold a total of 180 storage drawers with three, four or five tiers. There were 682 tiers for all these storage drawers. The total number of the three-tiered and four-tiered storage drawers was thrice the number of the five-tiered storage drawers.

(a) How many five-tiered storage drawers were there?

(b) How many three-tiered storage drawers were there?

Storage Drawers



Three-tiered **Four-tiered** **Five-tiered**

Ans: (a) _____ [1]

(b) _____ [4]

17 There were two types of fish in a pond. The number of catfish was $\frac{3}{7}$ of the number of goldfish. When 21 goldfish and some catfish were added into the pond, there was a 15% increase in the number of goldfish and the number of fish in the pond was increased by 35%.

(a) How many catfish were there at first?

(b) How many catfish were added into the pond?

Ans: (a) _____ [2]

(b) _____ [3]

18 A shop owner paid a total of \$5504 for some shirts and some ties. He paid \$128 less for the shirts than the ties. Each tie cost \$16 more than each shirt. The number of ties bought was $\frac{2}{3}$ of the number of shirts bought.

(a) How much did he pay for all the shirts?

(b) How many shirts did he buy?

Ans: (a) _____ [1]

(b) _____ [4]

END OF PAPER

ANSWER KEY

YEAR : 2017
LEVEL : PRIMARY 6
SCHOOL : NANYANG PRIMARY
SUBJECT : MATHEMATICS
TERM : CA1

Paper 1

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

Q16 22

Q17 320

Q18 5.07

Q19 3.021

Q20 $\frac{1}{8}$

Q21 $10\frac{1}{2}$

Q22 159 300

Q23 119 sec

Q24 8 cookies

Q25 90 pages

Q26 6 packets

Q27 81 %

Q28 10

Q29 $\frac{13h}{4}$

Q30 $10

Paper 2

Q1 C → 8u
S → 1u
8u → 354
1u → S ⇒ <u>44.25 kg</u>

Q2 $7\frac{1}{4} + 5\frac{3}{8} + 7\frac{1}{4} = 19\frac{7}{8}$ cm

Q3 100% → $2990

107% → $2990 x $\frac{107}{100}$ = $3199.30

$3199.30 - $2990 ⇒ <u>$209.30</u>

Q4 700 x 5 = 3500
3500 ÷ 5 = 700
1 2 3 4 5 Total
698 + 699 + 700 + 701 + 702 = 3500
700 – 1 = 699
700 – 2 ⇒ <u>698</u>

Q5 <u>48 cards</u>

Q6 (a) 6.96 + 0.82 + 2.85 ⇒ <u>10.63 kg</u>

(b) 6.96 ≈ <u>7.0 kg</u>

Q7 (a) $8\frac{3}{4} - 2\frac{1}{6} = 6\frac{7}{12}$ cm

(b) $8\frac{3}{4} \times 6\frac{7}{12} = 57\frac{29}{48}$ cm^2

Q8 (a) Lisa received $\Rightarrow \$\left(\frac{n+24}{9}\right)$

(b) Lisa received $\rightarrow \frac{93+24}{9} \Rightarrow$ <u>$13</u>

Q9 (a) 100% → $2000
110% → $2200
$2200 - $2000 ⇒ <u>$200</u>

(b) 100% - 25% = 75%
$200 → 25%
$200 x 3 = $600
$600 + $2200 ⇒ <u>$2800</u>

Q10 Coen → 252 }
Devi → 304 } 738
Rashid → 182 }
738 ÷ 3 = 246
246 – 182 ⇒ <u>64 candies</u>

Q11 Box of 4 → $10.90
Box of 12 → $32
$250 ÷ $32 = 7.8125
$32 x 7 = $224
$250 - $224 = $26
$26 ÷ $10.90 ≈ 2
2 x 4 = 8
12 x 7 = 84
84 + 8 ⇒ <u>92 tarts</u>

Q12 8u – : = 3u
10u + 5u = 15u
15u – 3u = 12u
108 → 12u
1u → 108 ÷ 12 = 9
9 x 8 ⇒ <u>72 stickers</u>

Q13 <u>80%</u>

Q14 Keychain → $2.65
Magnet → $3.35
$3.35 x 7 = $23.45
$108.55 + $23.45 = **$132**
$3.35 + $2.65 = $6
$132 ÷ 6 = 22
22 x 2 = 44
44 – 7 ⇒ <u>37</u>

Q15 (a) 360

(b) 356

(c) 91

Q16 (a) 45

(b) 83

Q17 (a) 15% → 21

115% → 161 (total goldfish in the end)

161 – 21 = 140

140 ÷ 7 = 20 (1u)

20 x 3 ⇒ <u>60 catfish</u>

(b) 140 + 60 = 200

100% → 200

100% + 35% = 135%

$135\% \rightarrow 200 \times \frac{135}{100} = 270$

135% → 270

35% → 270 – 200 = 70

70 – 21 ⇒ <u>49 catfish</u>

Q18 (a) He paid $5504 for shirts + ties.

Shirts → $\frac{\$5504 - \$128}{2}$ ⇒ <u>$2688</u>

(b) <u>96 shirts</u>

End