CONTINUAL ASSESSMENT 1 (2017)

PRIMARY 6

MATHEMATICS

Tuesday **21 February 2017** **1 h 30 min**

Name: _____ ( ) Class: 6.( ) Parent's Signature _____

INSTRUCTIONS TO PUPILS

1 Do not turn over the pages until you are told to do so.

2 Follow all instructions carefully.

3 Answer ALL questions.

4 You are **not** allowed to use a calculator for this paper.

Section	Possible Marks	Marks Obtained
A	10	
B	15	
C	25	
Total	50	

This question paper consists of 15 printed pages (inclusive of cover page).

Optical Answer Sheet

1

2

3

4

5

6

7

Section A

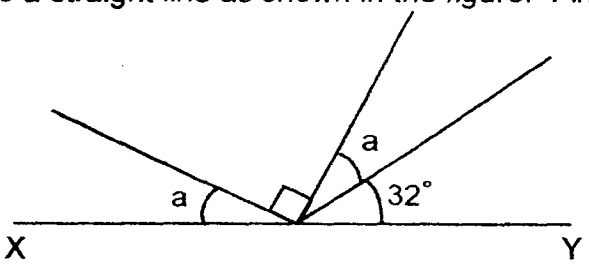
Questions **1** to **4** carry 1 mark each. Questions **5** to **7** carry 2 marks each.
For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS). (10 marks)

---

1. Nathanael had \$20. He spent \$3 on lunch and bought 3 pens that cost \$2m each. Express the amount of money he had left in terms of m.

   1) \$11m
   2) \$15m
   3) \$(17 – 6m)
   4) \$(20 – 9m)

2. XY is a straight line as shown in the figure. Find ∠a.



   1) 29 °
   2) 48 °
   3) 58 °
   4) 68 °

Sub-Total :

3. There are 56 cookies in a jar. 32 of them have chocolate chips and the rest have almond. What is the ratio of the number of almond cookies to the number of chocolate chips cookies in the jar?

1) 3 : 4
2) 4 : 3
3) 4 : 7
4) 7 : 4

4. $9 \times 58 = 14 \times 58 - 58 - 58 \times$ _____

1) 3
2) 4
3) 8
4) 9

5. Which of the following fractions is the largest?

1) $\frac{2}{3}$
2) $\frac{4}{5}$
3) $\frac{5}{7}$
4) $\frac{7}{9}$

Sub-Total :

6. Kim has some red, blue and green beads. The ratio of the number of red beads to the number of blue beads is 1 : 2. The number of green beads to the total number of blue and red beads is 1 : 4. What fraction of Kim's beads are green beads?

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

2) $\frac{5}{8}$

3) $\frac{5}{12}$

4) $\frac{8}{15}$

7. There are 48 girls in the canteen. 25% of the children in the canteen are girls. How many boys are there?

1) 144

2) 160

3) 192

4) 240

Sub-Total :

Section B1

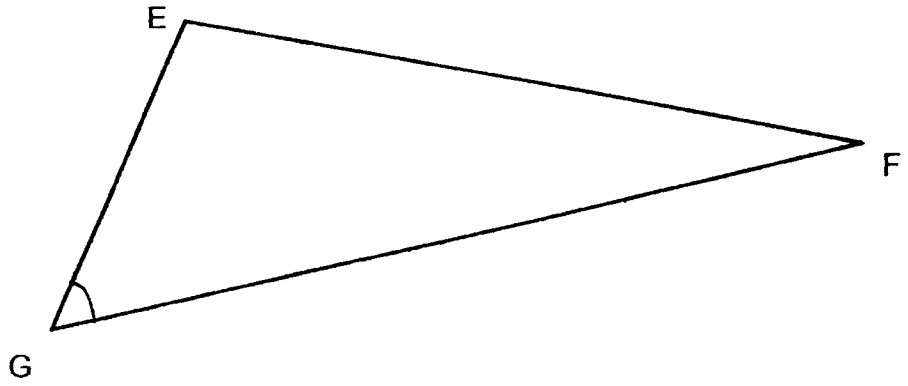
Questions **8** to **12** carry 1 mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(5 marks)

8. In a relay, Wesley ran $(2k + 7)$ km, Xander ran $(3k - 5)$ km and Zane ran $(3k + 2)$ km. What was the total distance that the 3 of them ran? Give your answer in terms of k in the simplest form.

Ans : _____ km

9. Measure and write down the size of ∠FGE.



Ans : _____ °

Sub-Total : ☐

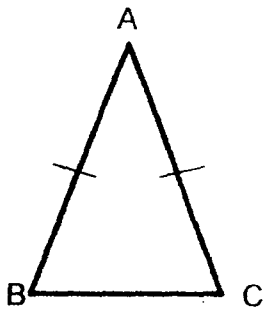
10. Samuel had $\frac{3}{4}$ of a cake. He gave the cake equally to 12 friends. What fraction of the cake did each friend receive?

Ans : _____

11. Find the value of $95 - 30 \div 5 \times (5 + 8) - 2$.

Ans : _____

12. In the figure below, ABC is an isosceles triangle. Its perimeter is 42 cm and AB is 16 cm. Find the length of BC.



Ans : _____ cm

Sub-Total : ☐

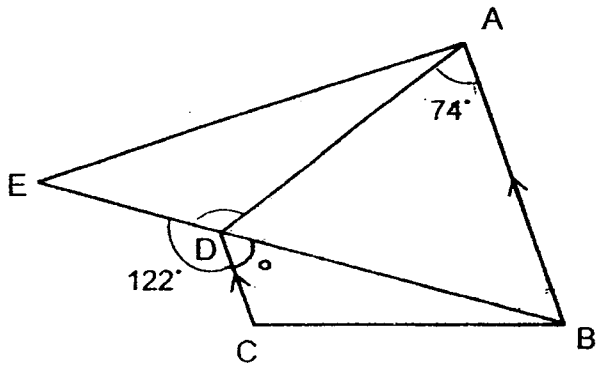
Section B2

Questions **13** to **17** 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)

---

13. In the figure, AB is parallel to CD. ∠DAB is 74° and ∠EDC is 122°. Find ∠EDA.



Ans : _____ °

14. In a school hall, 60% of the pupils are girls. Given that 30% of the girls have long hair, what percentage of the pupils in the hall are girls with short hair?

Ans : _____ %

Sub-Total : ☐

15. Fatimah had \$5n. After buying a few books at \$8 each, she had \$3 left. How many books did she buy? Give your answer in terms of n.

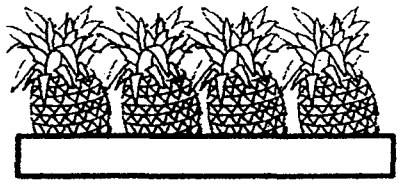
Ans : _____

16. Gregory spends 2 hours on his English, Mathematics and Mother Tongue homework daily. He uses $\frac{1}{3}$ of that duration on Mother Tongue homework. He uses $\frac{1}{4}$ of the time on English homework. How much time does he spend on Mathematics homework? Give your answer in hours.

Ans : _____ h

Sub-Total : [ ]

17.



$8 for one box of
4 pineapples

Able, Ben and Carl shared the cost of 60 pineapples in the ratio of 3 : 1 : 2.

How much did Ben pay?

Ans : $_____

Sub-Total :

Section C

For questions **18** to **24**, show your working clearly 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. (25 marks)

---

18. There are apples, pears and oranges in a fruit basket. $\frac{3}{7}$ of them are apples, $\frac{3}{8}$ of the remainder are pears and the rest are oranges. There are 12 more apples than pears. How many oranges are there?

Ans : _____ [3]

19. Daniel saves \$0.50 daily. For every \$3 that he saves, his mother adds another \$1 into his savings. How many days will Daniel take to have \$28 in his savings?

Ans : _____ [3]

Sub-Total : ☐

20. Arjun's water bottle is $\frac{1}{3}$ filled with water. He drank $\frac{1}{4}$ of the water and poured 450 ml of water in to fill it up completely. What is the capacity of the water bottle?

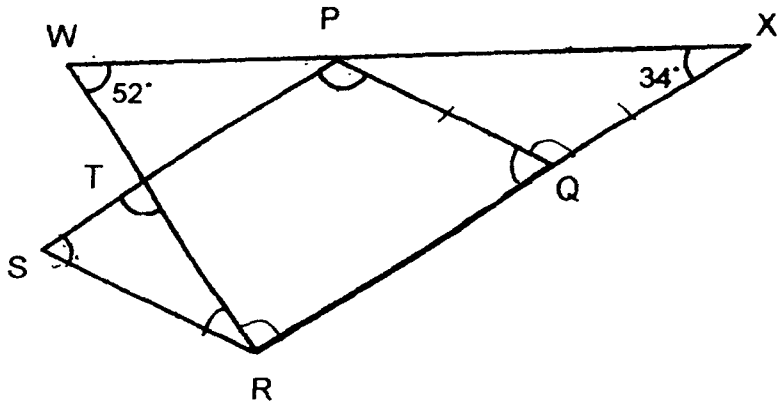
Ans : _____ [3]

Sub-Total :

21. In the figure below, PQRS is a parallelogram and PQ = QX. WPX and RTW are straight lines. $\angle PXQ = 34°$ and $\angle PWT = 52°$.

(a) Find $\angle QPS$.

(b) Find $\angle STR$.



Ans : (a) _____ [2]

(b) _____ [2]

Sub-Total :

22. A store had a total of 480 blue, black and white shirts. $\frac{1}{4}$ of the shirts were black and the rest were blue and white. After $\frac{1}{2}$ of the black shirts and some white shirts were sold, the number of black shirts left was the same as the number of blue shirts.

a) What fraction of the shirts were white at first?

b) Given that a total of 198 shirts were sold, how many white shirts were left?

Ans : (a) _____ [1]

(b) _____ [3]

Sub-Total :

23. Mrs Chan is preparing cupcakes for a party. The ratio of the number of adults to the number of the children attending is 2 : 1. Among the children, the number of boys and girls attending are the same. A total of 240 cupcakes are prepared so that each adult gets 1 cupcake and each child gets 3 cupcakes.

(a) What fraction of people attending the party are girls?

(b) How many girls are attending the party?

Ans : (a) _____ [1]

(b) _____ [3]

Sub-Total :

24. Mrs Low had 17.7 kg of sugar. She packed the sugar into two types of containers, small and large. She filled 2 large containers and 4 small containers with some sugar. She could not fill another large container with the remaining sugar as she was short of 0.8 kg. She then filled another small container and had 0.7 kg of sugar left.

(a) How many more kilogrammes of sugar did each large container hold than each small container?

(b) What was the mass of sugar in each small container?

Ans : (a) _____ [1]

(b) _____ [3]

End of Paper

Sub-Total :

ANSWER KEY

YEAR : 2017
LEVEL : PRIMARY 6
SCHOOL : ANGLO-CHINESE SCHOOL (JUNIOR)
SUBJECT : MATHEMATICS
TERM : CA1

Paper 1

Q1	Q2	Q3	Q4	Q5	Q6	Q7
3	1	1	2	2	1	1

Q8 8k + 4 km

Q9 54°

Q10 $\frac{1}{16}$

Q11 15

Q12 10 cm

Q13 $\angle ADC \rightarrow 180° - 74° = 106°$
$\angle EDA \rightarrow 360° - 106° - 122° \Rightarrow \underline{132°}$

Q14 $\frac{60}{100} \times \frac{70}{100} = \frac{21}{50}$

$\frac{21}{50} \times 100\% \Rightarrow \underline{42\%}$

Q15 $\left(\frac{5n-3}{8}\right)$

Q16 $1 - \frac{1}{3} - \frac{1}{4} = \frac{5}{12}$

$2 \times \frac{5}{12} \Rightarrow \frac{5}{6}$ h

Q17 $60 \div 4 \times 8 = 120$

$120 \div 6 \Rightarrow$ <u>$20</u>

Q18 $12 = 6u - 3u \rightarrow 3u$

$5u = 12 \div 3 \times 5 \Rightarrow$ <u>20 oranges</u>

Q19 $4 \rightarrow 3 \div 0.5 = 6$

Days $\rightarrow 28 \div 4 \times 6 \Rightarrow$ <u>42 days</u>

Q20 $1 - \frac{1}{4} = \frac{3}{4}$

$450 \rightarrow 1 - \frac{1}{3} \times \frac{3}{4} = \frac{3}{4}$

$\frac{4}{4} \rightarrow 450 \div 3 \times 4 \Rightarrow$ <u>600 ml</u>

Q21 (a) $\angle PQX \rightarrow 180° - 34° - 34° = 112°$

$\angle QPS = \angle PQX \Rightarrow$ <u>112°</u>

(b) $\angle WPS \rightarrow 180° - 102° - 34° = 34°$

$\angle WTP \rightarrow 180° - 52° - 34° \rightarrow 94°$

$\angle STR = \angle WTP \Rightarrow$ <u>94°</u>

Q22 (a) $360 - 60 = 300$

Fraction $\rightarrow \frac{300}{480} \Rightarrow \frac{5}{8}$

(b) $198 - 60 = 138$

$300 - 138 \Rightarrow$ <u>162 white shirts</u>

Q23 (a) $\frac{1}{6}$

(b) $240 = 4u + 6u \rightarrow 10u$

$1u = 240 \div 10 \Rightarrow$ <u>24 girls</u>

Q24 (a) Difference $\rightarrow 0.8 + 0.7 \Rightarrow$ <u>1.5 kg</u>

(b) 7 small $\rightarrow 17.7 - 0.7 - 1.5 - 1.5 = 14$

1 small $\rightarrow 14 \div 7 \Rightarrow$ <u>2 kg</u>