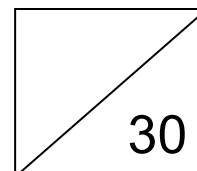


PRIMARY 6 MATHEMATICS

QUIZ 1



Name: _____ ()

Date: _____

Class: _____

Topics Included:

- Chapter 1 [Algebra]
- Chapter 2 [Fractions]

Instructions to pupils:

- DO NOT open this booklet until you are told to do so.
- Follow all instructions carefully.
- Answer ALL questions.
- The total marks for this paper is 30 (thirty).

Section A	5 marks
Section B	15 marks
Section C	10 marks
Total	30 marks

This paper consists of 10 printed pages.

Section A: (5 marks)

Questions 1 to 5 carry 1 mark each. For each question, four options are given.
Choose the correct answer and write its number (1, 2, 3 or 4) in the brackets provided.

1 Simplify $7 + 7y + 4 - 3y$.

(1) $3 - 4y$

(2) $3 + 10y$

(3) $11 + 4y$

(4) $11 - 10y$ ()

2 Find the value of $\frac{3}{4} \div 6$.

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

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

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

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

3 $\frac{3}{5} \div 15$ has the same value as _____.

(1) $\frac{3}{5} \times 15$

(2) $\frac{5}{3} \times 15$

(3) $\frac{3}{5} \times \frac{1}{15}$

(4) $\frac{5}{3} \times \frac{1}{15}$ ()

4 8 bags of rice weigh $(24a + 16b)$ kg. What is the weight of 4 such bags of rice?

(1) $(3a + 2b)$ kg

(2) $(6a + 4b)$ kg

(3) $(12a + 8b)$ kg

(4) $(96a + 64b)$ kg ()

5 Mr Tan had $(5a + 3)$ oranges and some apples at first. After selling $3a$ oranges, the number of apples was twice as many as the number of oranges left. Express the number of apples in terms of a .

(1) $2a + 3$

(2) $4a + 6$

(3) $10a + 6$

(4) $\frac{2a+3}{2}$ ()



Section B: (15 marks)

Questions **6** to **10** carry 1 mark each. Questions **11** to **15** 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.

- 6** Find the value of $\frac{3}{7} \div \frac{3}{5}$. Express your answer in the simplest form.

Ans : _____

- 7** Find the value of $6 \div \frac{3}{8}$.

Ans: _____

- 8** Find the value of $44 - 2 + \frac{5y}{3}$ when $y = 6$.

Ans: _____

- 9 Mrs Kumar divided $\frac{5}{6}$ kg of flour equally into 10 packets. What is the mass of each packet of flour?

Ans: _____ kg

- 10 Nabilah had $\frac{4}{5}$ kg of sweets. She packed them into bags of $\frac{1}{10}$ kg each. How many bags of sweets did she get?

Ans: _____

- 11 Shirley baked a cake and cut it into 4 equal pieces. She gave one piece to her 3 children to be shared equally. What fraction of the cake did each child get?

Ans: _____



- 12 Sharon had 8 m of cloth. She used $\frac{3}{8}$ m to make a cushion cover. What is the greatest number of cushion covers she can make?

Ans: _____

- 13 James is x years old. Mei Mei is twice as old as James and 3 years younger than Siti. What is Siti's age in terms of x ?

Ans: _____



- 14 The cost of 3 pens and 5 rulers is \$ y . If 1 ruler costs 60¢, find the cost of 1 pen in dollars in terms of y .

Ans: \$ _____

- 15 Huili bought some packets of potato chips at \$4 each. She gave the cashier \$50 and received \$ d change. Express the number of packets of potato chips Huili bought in terms of d .

Ans: _____



Section C: (10 marks)

For questions **16** to **18**, show your workings clearly and write your answers in the space provided. The number of marks available is shown in brackets [] at the end of each question.

16 3 boys and 4 girls folded $8r$ paper cranes altogether.

Working

- (a) If each boy folded 4 paper cranes more than each girl, how many paper cranes did each girl fold? Express your answer in terms of r .
- (b) If $r = 12$, how many paper cranes did each girl fold?

Copyrights of Singapore Math Inc.



Ans: (a) _____ [2]

(b) _____ [1]

- 17 Gary had some coffee beans at first. He gave away 14 kg of coffee beans and had $\frac{3}{5}$ of the coffee beans left. He packed the remaining coffee beans into bags of $\frac{3}{8}$ kg each. How many bags of coffee beans did he have in the end?

Working

Copyrights of Singapore Math Inc.



Ans: _____ [3]

- 18** At first, there were 7 rows of chairs in the school hall. Each row had $2n$ chairs. $(3n + 32)$ chairs were added and the chairs were rearranged into 9 equal rows.

Working

- (a) How many chairs were there in each row in the end? Give your answer in terms of n in the simplest form.
- (b) If 47 chairs were added, how many chairs were there in each row?

Copyrights of Singapore Math Inc.



Ans: (a) _____ [2]

(b) _____ [2]

END OF PAPER

Answer Key – P6 Quiz 1

Section A

Qn	Answer
1	(3)
2	(4)
3	(3)
4	(3)
5	(2)

Section B

Qn	Answer
6	$\frac{5}{7}$
7	16
8	52
9	$\frac{1}{12}$
10	$\frac{8}{1}$
11	$\frac{1}{12}$
12	21
13	$2x + 3$
14	$\left(\frac{y - 3}{3} \right)$
15	$\frac{50 - d}{4}$

Section C

16	(a) No of additional paper cranes folded by the boys $\rightarrow 3 \times 4 = 12$ (M1) No of paper cranes folded by each girl $\rightarrow (8r - 12) \div 7$ $= \left(\frac{8r - 12}{7} \right) \text{ (A1)}$ (b) No of paper cranes folded by each girl $\rightarrow \frac{8(12) - 12}{7}$ No of paper cranes folded by each girl $\rightarrow \frac{96 - 12}{7}$ $= 12 \text{ (A1)}$
17	2 units = 14 1 unit = $14 \div 2 = 7$ 3 units = 7×3 (M1) $= 21$ Bags of coffee beans $\rightarrow 21 \div \frac{3}{8}$ (M1) $= 56 \text{ (A1)}$

18

(a)

Number of chairs at first $\rightarrow 7 \times 2n$

$$= 14n$$

Total number of chairs $\rightarrow 14n + 3n + 32$ (M1)

$$= 17n + 32$$

Number of chairs in each row $\rightarrow (17n + 32) \div 9$

$$= \left(\frac{17n + 32}{9} \right) \text{ (A1)}$$

(b)

$$3n + 32 = 47$$

$$n = (47 - 32) \div 3 \text{ (M1)}$$

$$= 5$$

$$\text{Number of chairs in each row} \rightarrow \left(\frac{17(5) + 32}{9} \right)$$

$$= \mathbf{13} \text{ (A1)}$$