Mathematics 7 Topic: Ratio, Proportion and Rate

*Q1:* The ingredients to make one jug of Honey and Lemon juice are:

 1 cup of honey

 2 cups of Lemon juice

 8 cups of water.

Fill in the blanks accordingly.

i. For every 2 cups of lemon juice, you need _____ cups of water.
ii. For every 3 cups of honey, _____ cups of lemon juice is required.
iii. Mr.X has been asked to make 50 jugs of this drink. How much of each ingredient would he need?
Honey _____ , lemon juice _____ , water _____
iv. Ratio of amount of lemon juice to amount of honey is _____ .
v. Ratio of lemon juice to water in simplified form is _____.

*Q2: Choose the best option:*

i. The first element in the most simplified form of ratio 1.5 : 3/10 is
a) 10 b) 1 c) 5 d) 3
ii. If we divide Rs.210 between two persons A and B in the ratio 3:4 then share of person B is
a) Rs.90 b) Rs.120 c) Rs.70 d) Rs.60
iii. Ali pays Rs.240 for parking his car in shopping mall for 2 hours. How many charges he pay for 1 minute?
a) Rs.2 b) Rs.4 c)Rs.6 d) Rs.8



iv. If the price of book Is increased from Rs.140 to Rs.210 then ratio in which price increased is:
a) 2:3 b) 3:2 c) 3:4 d) 4:3
v. After increasing 72cm by the ratio 9:8 the new length will be:
a) 64cm b) 81cm c) 49cm d) 100cm

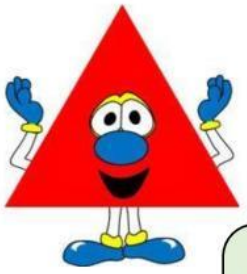
*Q3:* An aero plane is flying to Spain with 390 adults and children. The adults and children are in ratio 9:4.

a) How many adults are on aero plane? _____

b) How many Children are on aero plane? _____



*Q4:*



Hi, I am a triangle. Will you help me to find the following?

If my perimeter is 240cm and ratio among my sides is 4:3:5 then my largest side is _____cm long.

If the ratio among my angles is 2:3:4 then measurement of my smallest angle is _____.

*Q5:* Ahmed covered 8km distance in 1 hour. Complete the following table accordingly.

| Time (hours) | 1 | 2 | | |
|---|---|---|---|---|
| Distance (km) | 8 | | 32 | 72 |

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*Q6: Choose correct solution for each of the following.*

Ali types 240 words in 12 minutes. Saad types 150 words in 5 minutes.

a) How many words does Ali type in a minute?

Option 1:
$12 \div 240$
$= \frac{1}{20}$ words/min

Option 2:
$240 \div 12$
=20 words/min

b) How many words does Saad type in 1 minute?

Option 1:
$150 \div 5$
=30 words/min

Option 2:
$150 \times 5$
= 750 words/min

c) Who types faster? Ali Saad

*Q7:* If $A:B = \frac{1}{3} : \frac{5}{6}$ and $C:B = 2:5$ find A:B:C by placing the situation in correct order and fill in the boxes at the end. (Simplification is not required)

Step 1: _____

Step 2: _____

Step 3: _____

Step 4: _____

Step 5: _____

- $A:B = 1 \times 2 : 5 \times 1$
- $A:B = \frac{1}{3} \times 6 : \frac{5}{6} \times 6$
- $A:B = 2:5$
- $B:C = 5:2$
- find Continued ratio

A : B : C

____ : 5

_____ : _____

_____

_____ : _____ : _____

*Q8:* Match the Column.

| *Column A* | *Column B* |
|---|---|
| i) Ratio equivalent to 3:7 | 15 : 1 |
| ii) Ratio of 1.5m to 10cm | 11 : 6 |
| iii) In a class, fraction of boys=$\frac{6}{17}$ and fraction of girls= $\frac{11}{17}$ then number of girls : number of boys. | 9 : 21 |

*Q9:* In a school trip with 286 students, the ratio of boys and girls is 8:5. Then number of boys are :

110 176 150 135



*Q10:* Which of the four ratios is odd one out?

1:3:2

9:27:18

7:21:16

$\frac{1}{2} : 1.5 : 1$

LIVEWORKSHEETS

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