RATIO AND PROPORTION

Q1. Find the ratio of each of the following in its simplest form.

- a. 35 paise to ₹ 2.80 = ____ : ____
- b. 12 days to 4 weeks = _____ : _____

Q2. Match the following ratios with their lowest form:

96	2.5
124	5.5
A dozen to a score	50:33
$3 \frac{1}{3} : 2 \frac{1}{5}$	24:31

Q3. 240 sweets were distributed among Shipra, Vaishali and Tanu in the ratio of 2:3:5 respectively. Find the number of sweets each will get and fill in the blanks in the table.

Name of the child	Number of sweets
Shipra	
Vaishnavi	
Tanu	

- Q4. An alloy consists of 64 gm of copper and 320 gm of tin. Based on this information state true or false for the following statements:
 - a. Quantity of copper to quantity of tin = 1:5.
 - b. Quantity of tin to quantity of copper= 2:5.
 - c. Quantity of tin to total weight of the alloy= 5:7.
- Q5. Arrange the following ratios in descending order: 5:24, 7:16, 11:12

Answer: _____

Q6. In a $\triangle ABC$, the length of side AB is twice the length of side BC, CA is four times the length of side BC. Find the length of all the sides of the triangle if the perimeter of the triangle is 126 units.

Answer: Length of BC: _____ units

Length of AB: _____ units

- Length of CA: _____ units
- Q7. a, b, c and d are in proportion. If a =10, b=9, c=20, then find the value of d. Answer:
- Q8. Shikha baked a cake for 5 people using 200 g of sugar and 500 g of flour. How much sugar and flour will be required if she has to bake a cake using the same recipe for the following number of people:

No. of people	Quantity of sugar(in grams)	Quantity of flour (in grams)
20		
12		

Q9. A car travels 180 km in 2 hrs. Find the speed of the car in km/h and m/sec. How much distance will the car cover in 12 hours?

Answer: Speed of the car= _____ km/h = _____ m/sec

Distance covered in 12 hours = _____ km

Q10. Rishabh bought 3 dozen bananas for ₹ 180. How much should he pay if wants to buy 80 bananas?

Answer: _____

ANSWERS

1. a. 1:8, b. 3:7

2.	<u>96</u> 124	24:31
	A dozen to a score	3:5
	$3 \frac{1}{3} : 2 \frac{1}{5}$	50:33

3.	Name of the child	Number of sweets
	Shipra	48
	Vaishnavi	72
	Tanu	120

4. a. True

b. False

c. False

- 5. 11:12 > 7:16 > 5:24
- 6. BC=18 units, AB = 36 units, CA = 72 units
- 7. 18

8.

No. of people	Quantity of sugar(in grams)	Quantity of flour (in grams)
20	800gm	2000gm
12	480gm	1200gm

- 9. Speed of the car=90 km/h=25 m/sec; Distance covered in 12 hours =1080 km
- 10. ₹400