



# INDIAN SCHOOL AL WADI AL KABIR

Class VI, Mathematics (2023-24)

## Worksheet DTQ - RATIO & PROPORTION

### SHORT ANSWER TYPE QUESTIONS- 7 QUESTIONS. (2 Marks each)

<b>Q1.</b>	There are 15 red beads and 23 blue beads. Find i) The ratio of number of red beads to the number of blue beads ii) The ratio of number of blue beads to the total number of beads
<b>Q2.</b>	80 toffees are divided in the ratio of 2:3 between Aman and Suman respectively. How many toffees will each get?
<b>Q3.</b>	A rectangular field is 80 m long and 60 m wide. Find the ratio of its length to perimeter.
<b>Q4.</b>	Reena is 20 years old while her sister is 6 years younger than her. Find the ratio of their ages when Reena was 15 years old.
<b>Q5.</b>	Neelam's annual income is ₹ 2,88,000. Her annual savings amount to ₹36000. Find the ratio of her savings to her expenditure.
<b>Q6.</b>	If the cost of 24 oranges is ₹72, find the cost of 120 oranges.
<b>Q7.</b>	Sam organized a party. He decorated his house and arranged food for guests. He spent ₹1600 on decoration and ₹8000 on food. What is the ratio of the money that Sam spent on decoration to food?

### SHORT ANSWER TYPE- 5 QUESTIONS. (3 Marks each)

<b>Q8.</b>	Find the missing values in the ratio table. $\frac{15}{20} = \frac{3}{\quad} = \frac{\quad}{12} = \frac{\quad}{24}$
<b>Q9.</b>	Do the ratios 15cm: 2m and 10sec: 3minutes form a proportion? (Show working)
<b>Q10.</b>	Rita wants to divide ₹300 between his two sons Amit and Nitin in the ratio of their ages. If the age of Amit is 12 years and that of Nitin is 8 years. Find the share of each.
<b>Q11.</b>	A motorbike travels 220 km in 5 litres of petrol. How much distance will it cover in 2 litres of petrol?
<b>Q12.</b>	Determine if the following ratio form a proportion. Also, write the middle terms and extreme terms if the ratio forms a proportion. <b>2 kg: 24 kg and 30 sec: 6 minutes</b>

### LONG ANSWER TYPE- 3 QUESTIONS. (4 Marks each)

<b>Q13.</b>	If a bus travels 160 km in 4 hours and a train travels 320km in 5 hours at uniform speeds, then the ratio of the distances travelled by them in one hour. <b>(CBQ)</b>
<b>Q14.</b>	Mihir earns ₹24000 in 8 months. <b>(a)</b> How much does he earn in one year? <b>(b)</b> How much will he earn in 5 months? <b>(CBQ)</b>
<b>Q15.</b>	The present age of Ravi and Tanya are 22 years and 16 years. Find the ratio of <b>a)</b> Their present ages <b>b)</b> Ravi's age to the difference of their ages. <b>c)</b> Ravi's age after 4 years to Tanya's age 3 years ago. <b>d)</b> Ravi's age to that of Tanya's when she was 5 years old. <b>(CBQ)</b>

**ANSWERS**

<b>Q1.</b>	15:23; 23:38	<b>Q2.</b>	Aman= 32, Suman= 48	<b>Q3.</b>	2:7
<b>Q4.</b>	5:3	<b>Q5.</b>	1:7	<b>Q6.</b>	₹360
<b>Q7.</b>	1:5	<b>Q8.</b>	4, 9, 18	<b>Q9.</b>	No
<b>Q10.</b>	Amit = ₹180, Nitin = ₹120	<b>Q11.</b>	88km	<b>Q12.</b>	Yes, middle terms = 24kg and 30sec, extreme terms = 2kg and 6 minutes.
<b>Q13.</b>	5:8	<b>Q14.</b>	₹36,000, ₹15,000	<b>Q15.</b>	a) 11:8, b)11:3, c) 2:1, d) 11:5