



**INDIAN SCHOOL AL WADI AL KABIR**  
**Class VI- Mathematics *Worksheet- RATIO AND PROPORTION***  
**14-02-21**

**OBJECTIVE TYPE (1 Mark)**

<b>Q.1.</b>	If a, b, c, and d are in proportion, then which among the following is correct?							
	<b>A</b>	$a \times d = b \times c$	<b>B</b>	$a \times b = c \times d$	<b>C</b>	$a \times a = d \times c$	<b>D</b>	$a \times c = b \times d$
<b>Q.2.</b>	A box containing 80 room heaters, out of which 15 were found to be defective. Then, the ratio of defective to the good room heater is							
	<b>A</b>	16:3	<b>B</b>	3:16	<b>C</b>	13:5	<b>D</b>	3:13
<b>Q.3.</b>	Which among the following are in proportion?							
	<b>A</b>	32,48,15,21	<b>B</b>	30,5,13,52	<b>C</b>	20,60,13,39	<b>D</b>	20,60,39,13
<b>Q.4.</b>	The value of x in the given proportion $x : 3 :: 57 : 19$ is							
	<b>A</b>	57	<b>B</b>	9	<b>C</b>	10	<b>D</b>	3
<b>Q.5.</b>	Present age of father is 50 years and that of Apoorva is 20 years. Find the ratio of father's age to Apoorva's age when Apoorva will be 30 years old.							
	<b>A</b>	2:1	<b>B</b>	1:2	<b>C</b>	5:2	<b>D</b>	2:5
<b>Q.6.</b>	The marked price of a table is ₹ 600 and its sale price is ₹ 700. What is the ratio of the sale price to the marked price?							
	<b>A</b>	13:7	<b>B</b>	7:6	<b>C</b>	6:7	<b>D</b>	7:13
<b>Q.7.</b>	Mike can walk 128 km in 16 hours. What distance can he walk in 3 hours?							
	<b>A</b>	34	<b>B</b>	32	<b>C</b>	24	<b>D</b>	44
<b>Q.8.</b>	The length and breadth of a steel tape are 10 cm and 24 cm, respectively. The ratio of the length to the breadth is							
	<b>A</b>	5:12	<b>B</b>	10:34	<b>C</b>	34:10	<b>D</b>	24:34
<b>Q.9.</b>	The ratio of the number of sides of a square to the number of edges of a cube is							
	<b>A</b>	4:6	<b>B</b>	2:3	<b>C</b>	3:2	<b>D</b>	1:3

<b>Q.10.</b>	Find the missing number in the box in each of the proportions: $\frac{3}{5} = \frac{\quad}{20}$ .							
<b>A</b>	15	<b>B</b>	16	<b>C</b>	12	<b>D</b>	14	
<b>CASE STUDY QUESTIONS</b>								
At the parking stand of Tulip ground, Kritik counted that there are 125 Jeep Compass, 85 Harley Davidson and 40 Cadillac Escalade.								
(i) Find the ratio of the number of Jeep Compass to the total number of vehicles.								
<b>A</b>	4:3	<b>B</b>	1:3	<b>C</b>	1:6	<b>D</b>	1:2	
(ii) Find the ratio of the number of Harley Davidson to the number of Cadillac Escalade.								
<b>A</b>	17:7	<b>B</b>	17:8	<b>C</b>	17:125	<b>D</b>	40:17	
(iii) Find the ratio of the number of Jeep Compass to the number of Cadillac Escalade.								
<b>A</b>	25:8	<b>B</b>	30:8	<b>C</b>	35:8	<b>D</b>	8:35	
(iv) Find the ratio of the number of Cadillac Escalade to the total number of vehicles								
<b>A</b>	1:5	<b>B</b>	4:85	<b>C</b>	125:85	<b>D</b>	4:25	
(v) Find the ratio of the number of Harley Davidson to the number of Jeep Compass.								
<b>A</b>	7:3	<b>B</b>	17:21	<b>C</b>	17:25	<b>D</b>	20:21	
<b>Fill in the blanks (1mark)</b>								
<b>Q.11.</b>	If 5 kg of blueberries is bought for ₹ 140, then the cost of 8 kg of blueberries is _____.							
<b>Q.12.</b>	If a car A travels 180 km in 3 hours and a car B travels 140 km in 3 hours, then ratio of speed of car B to car A is _____.							
<b>Q.13.</b>	2 school bags cost ₹ 876. The cost of 18 such bags is _____.							
<b>Q.14.</b>	If the salary of 12 workers is ₹ 3732, then the salary of 5 workers will be _____.							
<b>Q.15.</b>	To find the ratio of two quantities, they must be expressed in _____ units							
<b>SECTION B (2 marks)</b>								
<b>Q.16.</b>	Find the greatest ratio among the ratios 2: 3, 40: 15, 75: 9 and 49: 21.							
<b>Q.17.</b>	6 buses carry 390 passengers. How many passengers can be carried by 13 such buses?							
<b>Q.18.</b>	The number of milk teeth in human beings is 20 and the number of permanent teeth is 32. Find the ratio of the number of milk teeth to the number of permanent teeth.							

<b>Q.19.</b>	A car travels 180 km in 3 hours. (a) How much time is required to cover 60 km with the same speed? (b) Find the distance covered in 5 hours with the same speed.												
<b>Q.20.</b>	Dakshesh walks 3 km in 45 minutes and Amol walks 5 km in 90 minutes. Who walks faster?												
<b>SECTION C (4 marks)</b>													
<b>Q.21.</b>	Of the 144 persons working in a company, 64 are men and the remaining are women. Find the ratio of the number of (i) men to that of women. (ii) the total number of persons to women (iii) men to the total number of persons.												
<b>Q.22.</b>	Determine if the following ratios form a proportion. Also, write the middle terms and extreme terms where the ratios form a proportion. (i) 3 m: 2 m and ₹ 90: ₹ 60 (ii) 50 cm: 4 m and 225 seconds: 1800 seconds (iii) 20 kg: 5 kg and 13 litres: 52 litres												
<b>Q.23.</b>	Cost of 2 kg of avocados is ₹ 170. (i) What will be the cost of 7 kg of avocados? (ii) What quantity of avocados can be purchased in ₹ 425?												
<b>Q.24.</b>	The weight of 56 books is 8 kg. (i) How many such books weigh 5 kg? (ii) What is the weight of 147 such books?												
<b>Q.25.</b>	<p>In a garden, the number of different types of flowering plants found are as follows:</p> <table border="1"> <thead> <tr> <th>Names of flowering plants</th> <th>No. of flowering plants</th> </tr> </thead> <tbody> <tr> <td>Carnation</td> <td>20</td> </tr> <tr> <td>Chrysanthemum</td> <td>60</td> </tr> <tr> <td>Snow drop</td> <td>12</td> </tr> <tr> <td>Hydrangea</td> <td>40</td> </tr> <tr> <td>Orchids</td> <td>24</td> </tr> </tbody> </table> <p>a) Find the ratio number of Chrysanthemum to number of Hydrangea. b) Find the ratio number of Orchid to number of Snow drop. c) Find the ratio number of Carnation to total number of Plants. d) Find the ratio number of Snow drop to total number of plants.</p>	Names of flowering plants	No. of flowering plants	Carnation	20	Chrysanthemum	60	Snow drop	12	Hydrangea	40	Orchids	24
Names of flowering plants	No. of flowering plants												
Carnation	20												
Chrysanthemum	60												
Snow drop	12												
Hydrangea	40												
Orchids	24												

\*\*\*\*\*

## Answers

Answers	<b>1</b>	A) $a \times d = b \times c$	<b>2</b>	D) 3: 13	<b>3</b>	C) 20,60,13,39	<b>4</b>	B) 9	
	<b>5</b>	A) 2:1	<b>6</b>	B) 7:6	<b>7</b>	C) 24	<b>8</b>	A) 5:12	
	<b>9</b>	D) 1:3	<b>10</b>	C) 12	<u>CASE STUDY</u> <u>ANSWERS</u> (i) D) 1:2 (ii) B) 17:8 (iii) A) 25:8 (iv) D) 4:25 (v) C) 17:25			<b>11</b>	₹ 224
	<b>12</b>	7:9	<b>13</b>	₹ 7884	<b>14</b>	₹ 1555	<b>15</b>	same	
	<b>16</b>	75:9	<b>17</b>	845 passengers	<b>18</b>	5:8	<b>19</b>	(i) $1 \text{ km} = \frac{1}{60} \text{ hrs}$ $60 \text{ km} = 1 \text{ hour}$ (ii) $1 \text{ hour} = 60 \text{ km}$ $5 \text{ hours} = 300 \text{ Km}$	
	<b>20</b>	<u>For 1 Km:</u> Dakshesh: 15 mts Amol: 18 mts Dakshesh walks faster	<b>21</b>	(i) 4:5 (ii) 9:5 (iii) 4:9	<b>22</b>	(i) yes Middle terms: 2 m and ₹ 90 Extreme terms: 3 m and ₹ 60 (ii) yes Middle terms: 4 m and 225 seconds Extreme terms: 50 cm and 1800 seconds (iii) not in proportion	<b>23</b>	(i) $1 \text{ Kg} = ₹ 85$ $7 \text{ kg} = ₹ 595$ (ii) $₹ 1 = \frac{1}{85} \text{ Kg}$ $₹ 425 = 5 \text{ Kg}$	
	<b>24</b>	(i) $1 \text{ Kg} = 7 \text{ books}$ $5 \text{ Kg} = 35 \text{ books}$	<b>24</b>	(ii) $1 \text{ book} = \frac{1}{7} \text{ Kg}$ $147 \text{ books} = 21 \text{ Kg}$	<b>25</b>	(i) 3:2 (ii) 2:1 (iii) 5:39 (iv) 1:13			