



Grade 7

Mathematics

Unit : 21 - Ratios

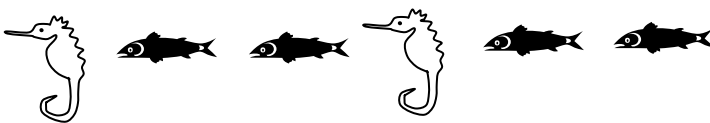
Part I

- (1) Write down two equivalent ratios
 i) 2 : 3 ii) 1 : 4 iii) 5 : 8
- (2) Express each of the following ratios in its simplest form.
 i) 8 : 20 ii) 25 : 75 : 125 iii) 70 : 90
- (3) A group of preschoolers has 8 boys and 24 girls. What is the ratio of boys to girls?
- (4) Heshani drew 1 heart, 1 star, and 20 circles. What is the ratio of circles to hearts.
- (5) A pattern has 4 blue triangles to every 12 yellow triangles. What is the ratio of blue triangles to all triangles?

Part II

- (1) i) Express in the simplest form.
 a) 12 cups to 21 cups.
 b) 32 quarts to 48 quarts.
- ii) At the zoo the ration of elephants to hippos is 1 : 2. So for every elephant, there are 2 hippos.
 a) If there were 3 elephants at the zoo, how many hippos would there be?
 b) If there were 10 hippos, how many elephants?
- iii) The ratio of nitrogen to phosphorous in a fertilizer is 5 : 2. If the mass of phosphorous in a bag is 300g. Find the total mass of the bag.

- (2) i) In a managed forest, three, different trees are planted. The trees are mango, delum, wood apple. for every mango tree planted, there are 2 delum trees planted and 5 wood apple trees planted.
- Write down the ratio of trees.
 - If 6 mango trees were planted, how many delum trees would be planted?
 - If 40 wood apple trees were planted, how many mango trees would be planted.
- ii) The ratio of Sinhalese to Tamils to muslims in a certain city is 5 : 4 : 3. If the total population in the city is 14 400, find how many Sinhalese there are in the city.

- (3) i) 

- What is the ratio of sea horses to angle fish?
 - What is the ratio of angle fish to sea horses?
- ii) A threeposha packet is made of green gram, soya and rice mixed in the ration 1 : 2 : 3 find the amount of rice in a 360 g packet
- iii) Sudeepa and sunil made a profit of Rs. 21 000 from there small business. They decide to divede the profit in the ratio 3 : 4. find how much of the profit each person receives.