### DAV PUBLIC SCHOOL, NIMAPARA

## SUBJECTS- MATHEMATICS, CLASS-VI

### CHAPTER-4 (RATIO, PROPORTION, AND UNITARY METHOD)

# WORKSHEET(BASIC)

TIME-45 Min. MAX.MARK- 20					
Choose the correct option: (1x2=2)					
1. The ratio of one dozen to one score is					
a.5:3 b 2:3 c. 3:2 d. 3:5					
2. The cost of six chocolates is Rs. 210, then the cost of four chocolates is					
a . Rs 90 b. Rs. 120 c. Rs. 140 d. Rs. 100					
Fill in the blanks : (1x2=2)					
3. The Ratio of even numbers to odd number in a set of natural numbers from 1 to 25					
is					
4. Four numbers are proportion , if the product of should be equal to product of					
·					
Answer the following. : (1x2=2)					
5. Express the Ratios in the simplest form.					
45 minutes to 4 hours.					
. Check whether the following ratios are in proportion or not.					
8 m:21m and Rs. 24: Rs 63					
Short Answer type question I : (2x2=4)					
7. Find the value of the X in the following proportion.					
27 : x :: 63 : 84.					
8. If the cost of 14 m of cloth is Rs. 1890, find the cost of 6 m of cloth.					

# Short Answer type question II : (3x2=6)

9. Manoj weight is 36 kg. His brother weight is 2 kg more. Find the Ratio of weight of manoj 's

brother to manoj.

10. Arun earns Rs. 390000 per year. Find his earnings for 25 weeks.

Long Answer type question : (1x4==4)

**11.** The Ratio of the number of male and female in a textile mill is 5:3. If there are 115 male workers, what is the number of female workers in the mill.

# DAV PUBLIC SCHOOL, NIMAPARA

#### SUBJECTS- MATHEMATICS, CLASS-VI

#### CHAPTER-4 (RATIO, PROPORTION, AND UNITARY METHOD)

#### WORKSHEET(STANDARD)

TIME-45 Min. MAX.MARK- 20

Choose the correct option: (1x2=2)

- 1. The value of m, if 3, 18, m, 42 are in proportion is:
  - a. 6 b. 54 c. 7 .d.none of these.
- **2. 7:12** is equivalent to :
  - **a. 28:40** b. 42:71 c. 72:42 d. 42:72

Fill in the blanks. (1x2=2)

- **3.** A Ratio is a form of comparison by \_\_\_\_\_.
- **4. Ratio** of 5 paise to 25 paise is the same as the ratio of 20 paise to \_\_\_\_\_.

Answer the following. : (1x2=2)

**5.** Are the following numbers in continued proportion.

**36**, 90, 75

6. The ratio of 10 cm to 10 mm is?

Short Answer type question I : (2x2=4)

**7.** Which of the following pairs is greater.

23:24 or 15:16

**8.** 4,x, 9 are in continued proportion, find the value of x.

#### Short Answer type question II : (3x2=6)

- 9. An office opens at 9 a.m and closes at 5 p.m with a lunch interval of 30 minutes. What is the ratio of lunch interval to the total period in office?
- 10. The length of a steel tape for measurements of buildings is 10 m and its width is 2.4 cm. What is the ratio of its length to width?

#### Long Answer type question : (1x4=4)

11. The number of boys and girls in a school are 1168 and 1095 respectively. Express the ratio of the number of boys to that of the girls in the simplest form.

# DAV PUBLIC SCHOOL, NIMAPARA SUBJECTS- MATHEMATICS, CLASS-VI CHAPTER-4 (RATIO,PROPORTION,AND UNITARY METHOD) WORKSHEET(ADVANCED)

TIME-45 Min. MAX.MARK- 20

Choose the correct option: (1x2=2)

- 1. The ratio of 1 cm to 1 mm is ----.
  - (a) 1:10 (b) 10:1 (c) 1:100 (d) 100:1
- 2. Express In Simplest Form.

4 kg. to 250 gm.

Fill in the blanks: (1x2=2)

3. The first and fourth terms of a proportion are called -----.

4. The ---- and ---- terms of a proportion are called means.

# Answer The Followings: (1x2=2)

5. Determine if the following ratio in proportion.

48 kg: 6 kg and 25 g: 200g

6. Find the value of "X" so that the four numbers are in proportion.

15, X, 27, 36

## Short Answer Type Questions I (2x2=4)

- 7. If 20% of X = 30% of Y, then X : Y = ?
- 8. Calculate the 3<sup>rd</sup> proportional to 16 and 32?

## **Short Answer Type Questions II (3x2=6)**

- 9. Two numbers are in the ratio of 8 : 3 & their sum is 242. Find the difference between the two numbers ?
- 10. Arun earns Rs.4,00,000 per year. Find the earnings for 30 weeks?

## Long Answer Type Questions: (1x4=4)

11. The sides of two squares are in the ratio of 5 : 7. Find the ratio of their areas.

# DAV PUBLIC SCHOOL, NIMAPARA SUBJECTS- MATHEMATICS, CLASS-VI CHAPTER-4 (RATIO,PROPORTION,AND UNITARY METHOD) WORKSHEET (HOTS)

1. Present ages of Rani & Kami are in the ratio of 5:6 respectively. 7 Year hence, this ratio will become 6:7 respectively. What is Rani's present age?

- **2.** Two numbers are in the ratio of 3 : 5. If 9 is substracted from each, the ratio becomes 12 : 23. Find the greater number ?
- **3.** If 4, x, 9 are in continued proportion, find the value of x?
- 4. 10 boys can dig a pitch in 12 hours. How long will 8 boys take to do it?
- **5.** A family consumes 30 kg of sugar in 15 days. How much sugar will be consumed in 275 days?
- **6.** Two numbers are respectively 20% and 50% more than a 3<sup>rd</sup> number. Find the ratio of two numbers ?
- 7. A finishes his work in 15 days while B takes 10 days. How many days will the same work be done if they work together?
- 8. Cost of 4 pens is Rs. 120 and 6 pencils is Rs. 60. If I want to purchase 6 pens and 2 penclis, how much should I pay?
- **9.** When 7 is added to the numerator and denominator of the fraction, then the new ratio of becomes 13:19, what is the original ratio?
- **10.** The ratio of age of krish and her mother is 5 : 12 and difference of their ages is 21. What will be the ratio of their ages after 3 years?
- **11.** A bullock cart travels 24 km in 3 hours & a train travels 120 km in 2 hrs. Find the ratio of their speeds?
- **12.** Ratio of A and B in the ratio of 5:8. After 6 years, the ratio of ages of A and B will be in the ratio of 17:26. Find the present age of B.
- **13.** The ratio of the length of a vertical pole and its shadow on the ground is 7 :2. Find the length of the pole, if the length of the shadow is 2.4 m.
- **14.** The ratio of boys and girls in the school is 7: 9, when 22 new boys are joined in this school then the ratio becomes 9: 10. How many girls in this school?
- **15.** If X:Y=7:4, then (4X+7Y):(7X+4Y)?