

Mathematics Test

Ratio and proportion and Unitary Method Time—1 hr

Class VI

M.M=40

Q1 Express the following ratios in the simplest form:

1 x 5 = 5

- a. 15 : 25
- b. 146 : 365
- c. 90 : 72
- d. 186 : 403
- e. 85 : 391

Q2. The number of boys and girls in a school are 480 and 384 respectively. 2 X 1 = 2

Express the ratio of the number of boys to that of the girls in the simplest form.

Q3. If the 72 persons working in an office 28 are men and the remaining 1 x 3 = 3
are women. Find the ratio of the number of:

- a. Men to that of women
- b. Men to the total number of persons.
- c. Persons to that of women.

Q4. A ratio in simplest form is 11 : 15. If its antecedent is 121. 2 x 1 = 2

Find its consequent.

Q5. In a school there are 420 boys and 180 girls. Find the ratio of 1 x 3 = 3

- a. Girls to boy
- b. Girls to total number of students
- c. Boys total number of students

Q6. Which of the followings numbers are in the proportion: $\frac{1}{2} \times 2 = 1$

- a. 30, 42, 5, 7
- b. 9, 13, 10, 14

Q7. Verify that: $\frac{1}{2} \times 2 = 1$

- a. 6 : 45 = 4.8 : 3.6
- b. 81kg : 45 kg = 18 men : 10 men

Q8. Rahul cycles at 12 km per hour. How far does he cover in 36 minutes? 3 x 1 = 3

Q9. Fill the missing in the following equivalent ratios:

$1 \times 5 = 5$

- a. $15/18 = ?/6 = 10/? = ?/30$
- b. $14/16 = ?/8 = 56/?$

Q10. Find x in the following proportions:

$1 \times 5 = 5$

- a. $x : 6 = 55 : 11$
- b. $18 : x = 27 : 3$
- c. $7 : 14 = 15 : x$
- d. $16 : 18 = x : 96$
- e. $12 : 18 = x : 21$

Q11. A car travels 180km in 4 hours.

$2 \times 2 = 4$

- a. How long will it take to travel 400 km at this speed?
- b. How far will it cover in 7 hours?

Q13. Ravi walks at a uniform speed of 4 km per hour. How much time does he take to cover 600 meters?

$3 \times 1 = 3$

Q14. The ratio of story books in a library to other books is 1 : 7. The total number of story books is 800. Find the total number of books in the library.

$3 \times 1 = 3$