

Class: 7
Subject: Mathematics
Topic: Comparing Quantities
No. of Questions: 20
Duration: 60 Min
Maximum Marks: 60

1. Find the ratio of 3 km to 300 m.

- A. It is 10:1
- B. It is 1:10
- C. It is 1:5
- D. None of these

A (As 3 km = 3000 m)

2. Map is given with a scale of 2 cm = 1000 km. What is the actual distance between the two places in kms, if the distance in the map is 2.5 cm?

- A. 1000 kms
- B. None of these
- C. 1250 kms
- D. 1500 kms

c (2 cm = 1000 km

1 cm = 500 km

2.5 cm = 500*2.5 = 1250 Kms)

3. 6 bowls cost Rs 90. What would be the cost of 10 such bowls?

- A. Rs 100
- B. Rs 150
- C. Rs 200
- D. None of these

B (6 bowls costs 90

One costs 15,10 will cost 150)

4. The car that I own can go 150 km with 25 litres of petrol. How far can it go with 30 litres of petrol?

- A. 210 km
- B. None of these
- C. 200 km
- D. 180 km

D (in 25 litres car can go 150 kms)

In one litre car will go $150/25 = 6$ kms, in 30 litres car will go $30*6 = 180$ kms)

5. The ratio of 90 cm to 1.5 m is

- A. It is 3:5
- B. None of these
- C. It is 3:2
- D. It is 5:3

A (90 cm is .9 m, so $.9/1.5$ is 3: 5)

6. A picnic is being planned in a school for Class VII. Girls are 60% of the total number of students and are 18 in number. The ratio of the number of girls to the number of boys in the class is

- A. It is 2:3
- B. None of these
- C. It is 3:1
- D. It is 3:2

D (Girls are 60% so boys are 40% and the ratio is 3:2)

7. Find the ratio of Speed of a cycle 15 km per hour to the speed of scooter 30 km per hour.

- A. It is 3:1
- B. It is 1:2
- C. It is 2:1
- D. It is 1:3

B (15:30::1:2)

8. 72% of 25 students are good in Hindi; how many are not good in Hindi?

- A. 7
- B. 8
- C. 5
- D. 10

A (Students good in Hindi is 72% of 25, i.e. $25 \times 72/100 = 18$)

Students not good in Hindi is $25 - 18 = 7$)

9. In a computer lab, there are 3 computers for every 6 students. How many computers will be needed for 24 students?

- A. 6
- B. 10
- C. 12
- D. 8

C (For 6 students 3 computers are there. For 1, $3/6$ computers are there.)

For 24, $24 \times 3/6 = 12$ computers are needed.)

10. Out of 32 students, 8 are absent. What percent of the students are absent?

- A. 75%
- B. 50%
- C. 10%
- D. 25%

D (Percentage = $8/32 \times 100$)

11. There are 25 radios, 16 of them are out of order. What percent of radios are out of order?

- A. 64%
- B. 50%
- C. None of these
- D. 75%

A (Percentage = $16/25 \times 100$)

12. The cost of a flower vase is Rs 120. If the shopkeeper sells it at a loss of 10%, find the price at which it is sold.

- A. Rs 108
- B. Rs 132
- C. Rs 110
- D. None of these

A (Selling price = cost price – loss)

$$\text{Loss} = 10 \% \text{ of } 120 = \text{Rs } 12.$$

$$\text{SP} = 120 - 12 = 108)$$

13. The marked price of a ceiling fan is Rs. 1250 and the shopkeeper allows a discount of 6% on it. Find the selling price of the fan.

- A. Rs 1175
- B. None of these
- C. Rs 1325
- D. Rs 1100

A (SP = MP – Discount)

$$\text{Discount is } 6 \% \text{ of } 1250 \text{ i.e. } 1250 * 6 / 100 = 75 \text{ SP} = 1250 - 75 = 1175)$$

14. The cost of one packet of balls having 20 balls is Rs. 100, what will be the cost of such 24 balls.

- A. Rs 80
- B. Rs 120
- C. Rs 60
- D. Rs 100

B (Cost of 20 balls = 100)

$$\text{Cost of 1 ball} = 100 / 20 = 5$$

$$\text{Cost of 24 balls} = 24 * 5 = 120)$$

15. Out of 80 students in a class 30 are girls. Find the percentage of girls in class.

- A. None of these
- B. 32.5%
- C. 30%
- D. 37.5%

D (% of girls = $30/80 \times 100 = 37.5\%$)

16. What percent of the total distance of 100km is 22km?

- A. 22%
- B. 66%
- C. 44%
- D. None of these

A (% Distance = $22/100 \times 100 = 22\%$)

17. To compare two quantities, the units must be the _____.

- A. None of these
- B. not same
- C. equal
- D. same

D (Fact)

18. Find 3% of 1hr in seconds.

- A. 72 seconds
- B. 36 seconds
- C. 108 seconds
- D. None of these

C (1hr = 60 mins = 3600 seconds

3% of 3600 = $3/100 \times 3600 = 108$ seconds)

19. In a village, 30% people are women, 40% are men rest are Children. What is the % of children in the village?

- A. 5%
- B. 20%
- C. 30%
- D. 10%

C (Sum of all the percentages must be 100
So children are 30 %)

20. $\frac{1}{3} = \text{---} \%$

- A. $33\frac{1}{3}\%$
 - B. None of these
 - C. 30%
 - D. 25%
- A ($1/3$ is 33.333.. % ($1/3*100$))