

## **WORKSHEET VIII STD – 2014 [ SA1]**

### **Ch -13 Direct and Inverse proportions**

1. In which of the following cases is there direct variation between the two given quantities? (Do not carry out any calculations)

(a) 10 workers finish a job in 6 days. In how many days will 20 workers finish the same job?

(b) A car runs at a uniform speed. If it covers 135 km in 3 hours, how much distance will it cover in 2 hours?

(c) A tap can completely fill a tank in  $1\frac{1}{2}$  hours. How much of it can be filled in  $\frac{3}{4}$  hours?

(d) Curtain cloth was purchased at Rs. 230 per meter. How much will 12 meters of cloth cost?

2. If the mass of 35 sheets of paper is 280 g, how many sheets will weigh 7.2 kg?

3. A family's expenses for 4 weeks 5 days amount to RS1980. What is their expense at the same rate for 6 weeks 2 days?

4. If 25 workers can finish a job in 40 days, how many workers will complete the same job in 25 days?

5. 40 kg of rice lasts 30 days in a family of 8 persons. If 2 guests stay with the family, how many days will 40 kg of rice last?

6. If Ram works 10 hours per day, he can finish a job in 28 days. If he has to finish the job in 20 days, how many hours should he work per day?

7. The cost of 18 notebooks is Rs.423. Find the cost of 20 notebooks.

8. 24 oranges can be packed 4 cartons. How many oranges can be packed in 12 cartons?

9. Check whether the given quantities are in proportion or not: page - 9

a) 11, 22, 17 and 36

b) 12, 24, 36 and 48

10) If 18 notebooks cost RS.1170. How much 25 will books cost?

11) In which of the following cases do the two quantities x & y vary inversely?

(a).

x	1	2	4	8	10
y	800	400	200	100	80

x	2	4	5	8	10
y	200	100	80	50	40

 (b)

12). X & y vary inversely. Complete the following table.

X	10	5	8		20
y	12	24		30	

13). Two quantities x & y vary directly. Complete the table.

X	6	8				18		24
y	12	16	18	24	32		40	

14. Check whether x & y vary inversely or not.

X	2	12	60	4	5	7.5	3
y	30	5	1	15	12	8	20

x	7	4	3	5	21	6	9
y	6	8	14	16	2	7	5

15. Complete the table if  $x$  &  $y$  vary inversely.

X	3	6		5	1.5	10
y	10	5	2			

16. A car travels 286 kms on 26 liters of petrol. How far will it travel on 36 liters.

17. A Map is drawn on a scale of 1cm: 1000km, if the distance on the map between the 2 cities is 5cm. What is the actual distance between them?

18. The S.I. on a certain sum is Rs.300.00 for two years. Find the S.I. on the same sum for 6-years at the same rate.

19. A family of 16 had enough food to last them for 20-days. If 4 guests arrived suddenly, for how long will the amount of food last?

20. 26-men can do a piece of work in 18-days. If the work is to be completed in 13-days, how many more men need to be hired?

21. At the speed of 18 km/hr. a cyclist covers the distance in 190 minutes. At what speed can he cover the same distance in 3 hrs.

22. If thirty men can do a piece of work in 15 days, in how many days will 25 men do it?

23. A car with the speed of 60 km/hour completes a journey in 3 hrs. if the journey can be completed in 4 hrs., what can be the speed of the car.