

INTERNATIONAL INDIAN SCHOOL

WORKSHEET VIII STD – 2015 [SA2]

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 $11\frac{1}{2}$ 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.

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VI—VIII Girls Section.

DATA HANDLING

1. The marks obtained 40 students of a class in an examination are given below; Prepare a frequency distribution table with class intervals starting from 0 - 10

8,47,22,31,17,13,38,26,3,34,29,11,22,7,15,24,38,31,21,35,42,42,24,45,23,
21,27,29,49,25,48,21,15,18,27,19,45,14,34,37,34.

2. The electricity bills (in rupees) of 25 houses of a certain locality for a month are given forma frequency table starting from 300 - 400.

324,700,617,400,356,365,435,506,548,736,780,378,570,685,312,630,584,
674,754,776,596,745,565,763,472.

3. The number of cycles produced in a factory during five consecutive weeks. Is given below draw a bar graph representing the above information

Week	first	second	third	fourth	fifth
Number of cycles	800	1300	1060	820	1440

3. A survey showed that the average daily expenditure (in Rs) of 24 household of a city were

215,248,225,210,237,227,240,238,215,214,249,236,244,221,219,232,216,24
2,220,230,238,228,225,211.

Prepare frequency table using class intervals 210- 215 and so on also draw a histogram for the above data0

5. The following is the frequency distribution of marks obtained by 45

Ina class test draw a histogram and answer the questions

Marks	10- 20	20- 30	30- 40	40- 50	50- 60	60 - 70	70- 80	80- 90
No of students	4	3	4	7	9	8	6	4

1. What is the size of the class (2) what percentage of students scored marks

Greater than 60 but less than 70 (3) how many get 60 or more marks?

6. A letter is chosen at random from a given word. Find the probability that

The letter is vowel if the word is NATURAL.

7. Prime numbers between 1 and 25 are written on identical slips, put in a box and mixed well. If a slip is drawn at random, what is the probability of getting?

(a) One digit number (b) an even number (c) an odd number (d) no: greater than 11

8. A bag contains 10 white balls and 7 green balls. They are mixed thoroughly

And one ball is drawn at random. Find the probability of getting the following

(a) A white ball (b) A green ball

(b) 10

9. A dice is thrown once. Find the probability of getting these outcomes

(i) A prime number (ii) Not a prime number (iii) A multiple of 3

10. Two coins are tossed simultaneously. Find the probability of getting

(i) 2 heads (ii) one head (III) no head (iv) at least one head (v) at most one head

11. What is the probability that a number selected from the numbers 1,2,3,4,.....20 is not a multiple of 3?

12. One card is drawn from a well shuffled deck of 52 cards. Find the probability

that the card drawn is of the following type. (a) A diamond (b) An Ace