

Chapter—13

Direct and Inverse Proportion

1. Which of the following are in Direct or Inverse proportion:

(a)

x	4	5	6
y	10	12	14

(b)

x	4	5	6
y	12	10	8

- (c) Distance travelled and petrol consumed by a car.
(d) Area of a piece of land and price of land.
(e) Speed of a car and time takes to cover a fixed distance.
2. Find the value of x and y if $x : y = 2 : 3$ and $2 : x = 1 : 2$
3. A car is moving at a uniform speed of 45 km/h.
(a) How far will it travel in 5 hours?
(b) Find the distance covered in 40 minutes.
4. In a students hostel with 32 students, a fixed quantity of food lasts for 45 days. If 16 more students join in, then the food will last for how many days?
5. A gardener can plant 30 plants in 2 hours How many more gardeners he should appoint so that they can plant 150 plants along the street in 2 hours?
6. If $2 : 3 = x : 51$ find x .
7. If x and y are in inverse proportion. Find the value of a , b and c in the table —

x	25	15	b	10
y	3	a	4	c

8. If $A : B = 2 : 3$ and $B : C = 4 : 5$ then. Find $A : C$

9. Four children C_1, C_2, C_3 and C_4 got 500 sq.m. of land each from their ancestor's property. After some time each distributed his property equally among their children as given in the table.

<i>Children</i>	C_1	C_2	C_3	C_4
<i>Share each child got</i>	500 m ²	250 m ²	125 m ²	100 m ²

- (a) Find how many children each had.
(b) What do you conclude from this?
10. If 628 persons can complete the work in 84 days then in how many days 1256 persons will complete the same work?