

1. If x and y are directly proportional, find the values of a, b, c, d and e

x	a	75	c	3	15	e
y	60	b	120	d	20	28

2. If x and y are inversely proportional, find the values of a, b and c

x	2	b	25	250
y	a	125	50	c

- 68 boxes contain commodity which require a shelf- length of 13.6 m. How many boxes of the same commodity would occupy a shelf- length of 20.4 m?
- 11 men can dig $6\frac{3}{4}$ m long trench in one day. How many men should be employed for digging 27 m long trench of the same type in one day?
- A car can finish a certain journey in 10 hours at the speed of 48km/hr. By how much should its speed be increased so that it may take only 8 hours to cover the same distance?
- A worker is paid Rs.210 for 6 days work. If his total income of the month is Rs. 875, for how many days did he work?
- The cost of 16 packets of salt, each weighing 900 g, is Rs 84. Find the cost of 27 packets of salt, each weighing 1kg.
- If 22.5 m of a uniform iron rod weighs 85.5 kg, what will be the length of 22.8 kg of the same rod?
- A fort had food provision for 300 men for 90 days. After 20 days, 50 men left the fort. How long would the food last at the same rate?
- The scale of a map is given as 1 : 2500000. If the distance between two towns in the map is 5 cm, what is the actual distance?
- To pack 100 apples in a carton, 20 cartons are needed.
 - How many cartons are needed, if 80 apples are packed in a carton?
 - How many apples can be packed in a carton if 40 cartons are available?
- A contractor employs a work force of 500 persons to complete construction of a bridge in six months. If he is asked to complete the work in four months then how many extra persons will he have to employ?
- 18 complete turns of screw-driver can just drive a screw through $4\frac{1}{2}$ cm plank. How many turns will be required to drive the screw through 9 cm plank?
- Shalu cycles to her school at an average speed of 12 km/h. It takes her 20 minutes to reach the school. If she wants to reach her school in 15 minutes, what should be her average speed?
- All workers in a factory are paid the same salary. If the salary of 100 workers is Rs.17,300, find how many workers can be paid if the available amount is Rs. 14,186.

