

Ch-13 Direct and Inverse Proportions

- A car runs at an average speed of 60 km/h. How much distance will it cover in 6 minutes? (6 km)
- If ₹ 1200 = \$ 20, convert
 - ₹ 24960 to dollars (\$416)
 - \$ 225 to rupees (₹ 13,500)
- On a 10 m stretch of road, 15 flags are placed at regular intervals. How many flags will be required for a similar arrangement on a 1.5 km stretch? (2250)
- A train covers $50\frac{1}{2}$ km in 1.25 hours. How much distance will the train cover in 3h 45 min? How long will it take to cover 202 km? (151.5 km, 5h)
- A stack of 1071 sheets of paper is 6.3 cm thick.
 - What will be the thickness of a stack of 15000 sheets? (88.24 cm)
 - How many sheets will be there in a stack 15 cm thick? (2550)
- If 12 inches = 30 cm, how many inches are there in 140 cm? (56 inches)
- If 16 cows can graze a field completely in 25 days, how long will 20 cows take to completely graze the same field? (20 days)
- A camp has provisions to feed 90 people for 32 days. How many days will the provisions last if 30 more people join the camp? (24 days)
- Manav takes 20 minutes to reach his school from home, walking @ 4 kmph. How long will it take him to reach his school if he walks @ 3 kmph? (26 min 40 sec)

10. A certain quantity of fodder can last for 15 days for 12 cows. If 3 cows were sold away, how long will the same quantity of fodder last for the remaining number of cows? (20 days)
11. A factory requires 42 machines to produce a given number of articles in 56 days. How many machines would be required to produce the same no. of articles in 48 days? (49 machines)
12. 7 taps of same size fill a tank in 1h 36 min. How long will 8 taps of the same size take to fill the tank? (1h 24 min)
13. If x and y vary inversely and $x=15$ when $y=6$, find y when $x=9$. ($y=10$)
14. A train travelling at 96 km/h covers a certain distance in 40 min. If the speed of the train is increased by 4 km/h, by how much is the time taken reduced? (1 min 36 sec)

—————x—————x—————x—————