

1. Find the value of m and n in the given table if x and y vary directly.

a)

x	5	m	12	15
y	65	91	156	n

b)

x	m	20	10	5
y	6	4	n	1

2. A laborer earns 250 per day, how much will he earn in 31 days?
3. A manufacturer produces 2080 toys in a day. Working at the same rate how many toys will it produce in  $4\frac{1}{2}$  days?
4. The cost of 6 kilograms of rice is Rs. 665.40. How much rice can be bought for Rs. 499.05?
5. 260 ml of milk can be filled in one bottle. How many such bottles are required to fill 41.6 litres of milk?
6. 2 boxes of cherries cost 350. What will be the cost of 5 such boxes?
7. Ali can read 40 words in a minute. How many words will he be able to read in 12 minutes, if he continues to read at the same speed?
8. A car can cover a distance of 21 km with 1.5 litres of petrol. How much distance will the car cover with 20 litres of petrol?
9. The cost of  $62\frac{1}{2}$  m of cloths is Rs.1525. Find the cost of 280m of cloth.
10. A tap can fill  $\frac{2}{15}$  th a tank in 8 minutes.
- a) how much of the tank will be filled in 20 minutes?
- b) how much time will it take to fill the whole tank?
11. 15 people can complete 5 projects in a week, how many projects can be completed by 12 people in a week?
12. The cost of a pizza varies directly with its size. If a 6 inch pizza costs 120, what will be the cost of an 12 inch pizza?

1. Find the value of m and n in the given table if x and y vary inversely

a.

x	3	4	N	6
y	60	M	36	30

b.

x	2	4	5	n
Y	M	65	52	20

- 8 men can complete a work in 12 days. In how many days can 6 men complete the same work?
- 16 men can build a wall In 25 days. How many days will 20 men take to build the same wall?
- In a boy's hostel, there is enough ration for 125 students to last for 21 days, How long will the food last if 50 more students join them?
- 22 men can reap a field in 15 days. how many days will 55 men take to do the same work?
- 4 painters can paint a house in 6 days, how many days would 3 painters take to paint the same house?
- 3 tractors can plough a field in 6.5 h, how much time will 5 tractors take to plough the same field?
- 6 pipes running together can fill a tank in 36 minutes. Considering that water flows through all the pipes at a constant rate, how much time will 9 pipes take to fill the same tank?
- The length of a rectangle is inversely proportional to its breadth. When the length is 5 m the breadth is 2 m, what will be the length if the breadth is 2.5 m?

### Formative assessment

- Fill in the blanks.
  - The distance travelled by a car varies \_\_\_\_\_ to the time taken.
  - The number of people completing a project varies \_\_\_\_\_ to the number of days taken.
  - The length of a rectangle varies \_\_\_\_\_ to its area.
  - Variation when  $\frac{x}{y} = k$  is \_\_\_\_\_ variation.
- State true or false.
  - More men take more time to finish a job.
  - In direct proportion if the value of a quantity is doubled, then the oilier quantity becomes half.
  - Two quantities are in inverse proportion if  $x \times y$  is a constant.
- 14 men working 9 hours a day can earn Rs.54880 in a week. How much will 18 men working 9 hours a day earn in a week?
- 6 pumps can empty a tank In 12 hours. how many pumps will empty the tank in 18 hours?
- The price of 80 metres of cable wire is Rs.560. What will be the price of 125 m of cable wire?

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2. State true or false.
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5. The price of 80 metres of cable wire is Rs.560. What will be the price of 125 m of cable wire?