

CHAPTER 10

Direct and Inverse Proportions

Example:

12 painters can paint a wall of 180m long in 3 days. How many painters are required to paint 200m long wall in 5 days?

Sol.

Here, number of painters are indirect proportion to length of the wall and inversely proportional to the number of days.

No. of painter	Length of the wall (m)	No of days
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12	180	3
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x	200	5
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12 : x	180 : 200 = 9 : 10	3 : 5
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Number of painters $\propto$ Length of the wall

$$12 : x = 9 : 10 \dots\dots (1)$$

$$\text{Number of painters} \propto \frac{1}{\text{Number of days}}$$