ed the garden in 15 minutes. $_{
m ut}$ ion : Let x gardeners be needed to

3
w

quired to complete the job. ore gardeners on the job means less time

fince, it is a case of inverse proportion.

$$3 \times 90 = x \times 15$$

 $3 \times 90 = x \times 15$
 $x = \frac{3 \times 90}{15} = 18$ gardeners.
three gardeners are already working,

ie job. three gardeners are already working, so -3 = 15 more gardeners need to be put on

> Problem 10: 25 pumps can fill a reservoir in pumps fill the reservoir? 12 hours. In how many hours can 15 such

be x hours. Solution: Let the required number of hours

15

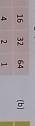
Number of pumps decreases so number of hours would be increased. So, it is an inverse

$$25 \times 12 = 15 \times x \implies x = \frac{25 \times 12}{15} = 20$$
Hence, required number of hours is 20.

EXERCISE 13.2

Check, whether the following quantities are in indirect proportion or not:

(a)	x an		(a)
×	d y ar	b	a
00	x and y are inversely proportional, then find the missing	16	4
10	rsely p	00	00
6	propor	4	16
0	tional	2	32
	, then	1	64
	find t		
(b)	he mi		(b)
a	ssing	6	









14

; values : 60 72

360

150

0 180

90

If 15 men can repair a road in 24 days, how long will 9 men take to repair the same road? 25

a

If 16 horses, consume a certain quantity of corn in 25 days, in how many days would the same quantity be consumed by 40 horses?

A factory requires 28 machines to make some shirts in 20 days. If 4 machines are not working properly, then in how many days the remaining machines can make the same number of shirts? 12 pumps can fill a reservoir in 15 hours. In how many hours will 10 pumps take to fill the same

A farmer has enough fodder to feed 28 animals for 5 days. How long would the food last if there

A train takes 10 hours to reach a destination if it travels at a speed of 65 km/h. What should be its speed to reach the destination in 13 hours?

169

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