7 DIRECT AND INVERSE VARIATION

Q1. Surbhi takes 15 days to make a carpet. How much work will be done by her in:

a. 3 days?

Work done: _____

b. 5 days?

Work done: _____

c. 10 days?

Work done: _____

Q2. 2 men or 3 women earn ₹ 480 per day. How much money can 5 men and 6 women together earn in a week?

Answer: _____

Q3. If 12 men construct a house in 35 days, how many days will 15 men take to construct an identical house?

Answer: _____

Q4. Raju weaves thrice as fast as Kamini. If Raju finishes weaving a shawl in 6 days, how many days will both of them together take to weave a shawl?

Answer: _____

Q5. 7 men plough a field in 30 days working 12 hours a day. In how many days can 15 men plough the same field, if they work 8 hours a day?

Answer: _____

Q6. 12 software developers take 35 days to make a website. How many more developers should be hired, if two such websites are to be completed in 10 days?

Answer: _____

Q7. A, B and C alone finish a piece of work in 12 days, 15 days and 9 days respectively. If all of them work together for 3 days, after which A and B leave, find the number of days taken by C to finish the remaining work.

Answer: _____

Q8. A, B and C together can do a work in 12 days. A alone can do it in 18 days while A and B can do it in 14 days. In how many days will A and C do the same work?

Answer: _____

Q9. A and B can reap a field in 6 days, B and C in 8 days, and C and A in 12 days. If all of them work together, in how many days will they be able to reap the same field?

Answer: _____

Q10. A and B together can do a work in 40 days. B alone can do one–fourth of the work in 24 days. In how many days A alone can do it?

Answer: _____

Answers

1. a. $\frac{1}{5}$ work; b. $\frac{1}{3}$ work; c. $\frac{2}{3}$ work
2. ₹ 15,120
3. 28 days
4. $4\frac{1}{2}$ days
5. 21 days
6. 30 more developers
7. $1\frac{19}{20}$ days
8. $14\frac{14}{17}$ days
9. $5\frac{1}{3}$ days
10. $68\frac{4}{7}$ days