
Steps to Solve Time and Work with Trick

Step 1. Take the LCM of a given Number

Step 2. Add or Subtract According to a particular question

Step 3. The LCM from Step 1. will be the total work . Divide the total work with the outcome of Step 2.

Problems

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1. Ram , Shyam and Mohan can do a piece of work in 12,15 and 20 days respectively, how long will they take to finish it together .

R	12		5
S	15	60	4
H	20		3

$$\frac{60}{5+4+3} = \frac{60}{12} = 5 \text{ days}$$

Step 1. Take the LCM of 12,15 and 20 which is 60.60 is the total work

Step 2. Divide 60 by (each number)12,15 and 20 ,you will get 5,4 and 3 respectively. Now you get Ram's work in one day is 5 or 1/5 .Shyam's one day work = 4 or 1/4 and so on.

Step 3. Now add Each Men's 1 day work (5+4+3) which 12. Now here 12 is Ram , Shyam and Mohan together's 1 day work.

Step 4. Now Divide 1 day's work with Total work (60/12) , you will get Total time taken by them to do the same work which is in this case is 5 days.

2. A and B together can complete a piece of work in 4 days. If A alone can complete the same work in 12 days, in how many days can B alone complete that work ?

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A + B   4                3
                 12
A       12               1
                 ---------------
                         2

                         12
                 ---------------  = 6 days
                         2
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Step 1. Take the LCM of 4 and 12 which is 12.Twelve is the total work
Step 2. Divide 12 by (each number)4 and 12 ,you will get 3 and 1 respectively.
Now you get A and B's work in one day is 3 or 1/3 . A's one day work = 12 or 1/12 and so on.
Step 3. Now Subtract their work (3-1) you will get 2.
Step 4. A and B done the work in 4 days .Now by placing the value of A . you will get the B's work which is 2 days.
Step 5. Divide Total work by B's one day work. like here 12/2 = 6

3.A does a work in 10 days and B does the same work in 15 days. In how many days they together will do the same work ?

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A       10                3
                  30
B       15                2
                  ------------
                          5

                          30
                    --------- = 6 days
                          5
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Step 1. Take the LCM of 10 and 15 which is 30. Thirty is the total work
Step 2. Divide 30 by (each number)10 and 15 ,you will get 3 and 2 respectively.
Now you get A's work in one day work is 3 or 1/3 . B's one day work = 2 or 1/2 .
Step 3. Now add Each Men's 1 day work (3+2) which 5. Now here 5 is A and B together's 1 day work.
Step 4. Now Divide 1 day's work with Total work (30/5) , you will get Total time taken by them to do the same work together which is in this case is 6 days.

4. A,B and C can complete a piece of work in 24,6 and 12 days respectively, working together, they will complete the same work in ?

A	24		1
B	6	24	4
C	12		2
			7

$$\frac{24}{7} = 3\frac{3}{7} \text{ -- days}$$