

Time & Work

1. A takes 6 hours to do a job. B also takes 6 hours to do the same job. How long should it take for both A and B, working together, to do the same job?

A. 3 hrs. B. 6 hrs. C. 9 hrs. D. 12 hrs.

2. Keerthi takes 8 hours to do a certain task while Raja takes 10 hrs. to do the same. Starting at the same time together, how long do they take to finish the task?

A. $\frac{40}{9}$ hrs. B. $\frac{46}{99}$ hrs. C. 2 hrs. D. 18 hrs.

3. Bhavana and Sanjana together can do a particular project in 60 days while Bhavana alone can execute the same in 90 days. In how many days can Sanjana carry out this project working alone?

A. 150 B. 30 C. 75 D. 180

4. Anil and Bhaskar can do a piece of work individually in 12 and 20 days respectively. They work together for 6 days before Anil decides to leave. How many days will it take Bhaskar to complete the work on his own?

A. 4 B. 14 C. 6 D. 3

5. P and Q can do a piece of work in 12 days, P and R can do the same work in 15 days, Q and R can do the same work in 20 days. In how many days can they finish the work together?

A. 5 B. 10 C. 6 D. 8

USING CYCLES:

6. Amit can write 5 pages a day. Bella can erase 2 pages a day. How many days will they take to write a 60 page record book if they work on alternate days (Amit works on the first day)?

A. 20 B. 40 C. 38.6 D. 30

7. Archana and Lakshmi together can do a piece of work in 12 days. If Vidya, who is half as efficient as Archana joins them, they will complete the entire work in 10 days. In how many days can Archana and Vidya together complete the same work?

A. 20 B. 24 C. 30 D. 18

8. Three people Hari, Ravi and Kavi can complete a work in 15, 20 and 30 days respectively. Only two of these three work on any given day. But, the same two people do not work for any two consecutive days. What is the least number of days in which the work is completed?

A. 5 B. 9 C. 8 D.

GROUP WORK:

9. 30 men take 24 days, for the same task, 20 men take?

A. 16 days B. 36 days C. 18 days D. 48 days

10. 45 men can complete a work in 16 days. 6 days after they started working, 30 more men joined them. How many more days will they take to complete the remaining work?

A. 8 days B. 6 days C. 10 days D. 12 days

11. In a production shop, 480 units were required to be produced. The supervisor had appointed 10 workers to do the job. However, some of them did not report for duty. As a result, each of those who were present, had to produce 72 units more than originally planned. How many workers did not report for work?

A. 4 B. 5 C. 6 D. None

12. If 4 men or 7 women can complete a work in 14 days, how many men should accompany 14 women so that the work will be completed in 3 and half days?

A. 6 B. 5 C. 8 D. 7

PIPES & CISTERNS:

13. Two pipes A and B can fill a tank in 24 min. and 32 min. respectively. If both the pipes are opened simultaneously, after how much time pipe B should be closed so that the tank is full in 18 minutes?

A. 10 B. 12 C. 11 D. 8

14. A large tanker can be filled by two pipes P and Q in 60 minutes and 40 minutes respectively. How many minutes will it take to fill the tanker from empty state, if Q is used for half the time and P and Q fill it together for other half?

A. 15 min B. 20 min C. 27.5 min D. 30 min

15. A bath has two taps and a waste pipe. One of the taps would fill the bath in ten minutes & the other would take a quarter of an hour, the waste pipe can empty a full bath in exactly seven and half minutes. Now if we start with an empty bath with both taps fully on, when (if ever) will the bath be full if the waste pipe is left open?

A. 15 min B. 44 min C. 22.5 min D. 30 min

16. Pipe A takes 16 min to fill a tank. Pipes B and C, whose cross-sectional circumferences are in the ratio 2:3, fill another tank twice as big as the first. If A has a cross-sectional circumference that is one-third of C, how long will it take for B and C to fill the second tank? (Assume the rate at which water flows through a unit crosssectional area is same for all the 3 pipes.)

A. 66/13 B. 40/13 C. 16/13 D. 32/13

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PERK UP QUESTIONS:

P1. Akash can construct a wall in 20 days, Surya can do the same in 30 days but Agni can destroy the same wall in 40 days. Only one person works every day, with Akash starting on the first day followed by Surya the next day and then Agni takes over and this pattern repeats. How many days does it take to construct a wall?

- A. $50\frac{2}{3}$ B. $49\frac{1}{2}$ C. $17\frac{1}{6}$ D. $51\frac{1}{6}$

P2. Rahul is 50% as efficient as Sourav. Sachin does two-fifths of the work done by Rahul and Sourav together. If Sachin alone does the work in 30 days, in how many days can all three together finish the work from the halfway mark?

- A. 20 B. 10 C. 5 D. None

P3. 4 men and 7 women can complete a work in 8 days, 5 men and 3 women can complete the same work in 18 days. In how many days can 1 couple among them finish the work?

- A. $\frac{276}{5}$ B. $\frac{216}{5}$ C. 72 D. None

P4. Manu working alone on a job takes 12 days more than what he would have taken if Bhanu had worked along with him while Bhanu working alone on the same job takes 27 days more than what he would have taken if Manu had worked along with him. Find the time that both of them working together would take to do the job?

P5. Anil and Bhaskar can do a piece of work individually in 12 and 20 days respectively. 6 days before the whole work gets over Anil leaves. Total how many days required to complete the work?

- A. 17.5 B. 14 C. 11.25 D. 3

P6. A hen and a half, lays an egg and a half in a day and a half. Then half a dozen hen will lay how many eggs in half a dozen days?

P7. If 20 men or 24 women or 40 boys can do a task in 12 days working for 8 hours a day, how many men working with 6 women and 2 boys take to do a task four times as big working for 5 hours a day for 12 days?

- A. 8 men B. 2 men
C. 122 men D. 24 men