
TIME & WORK

- KOUSTAV



CONCEPT

1. A can do a piece of work in 20 days and B can do it in 15 days. How long will they take if both work together?

A) $62/7$ days

B) $60/7$ days

C) $66/7$ days

D) $67/7$ days

2. Jai can do a piece of work in 10 days and Veeru can do the same work in 20 days. With the help of Basanti, they finish the work in 5 days. How long will it take for Basanti alone to finish the work?

A) 20 days

B) 10 days

C) 35 days

D) 15 days

3. Frodo can do $\frac{1}{2}$ of the work in 8 days while Bilbo can do $\frac{1}{3}$ of the work in 6 days. How long will it take for both of them to finish the work?

- A) $\frac{88}{17}$ days B) $\frac{144}{17}$ days
C) $\frac{72}{17}$ days D) 8 days

4. Gangadhar can do 25% of a piece of work in 5 days. How many days will he take to complete the work 10 times?

- A) 150 days B) 250 days
C) 200 days D) 180 days

5. 6 men can do a piece of work in 12 days. How many men are needed to do the work in 18 days?

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|----------|----------|
| A) 3 men | B) 6 men |
| C) 4 men | D) 2 men |

6. X number of men can finish a piece of work in 30 days. If there were 6 men more, the work could be finished in 10 days less. The original number of men is

- | | |
|-------|-------|
| A) 10 | B) 11 |
| C) 12 | D) 15 |

7. Chandler can do a piece of work in 10 days. Joey can do it in 15 days. If the total wages for the work is Rs. 50. How much should Chandler be paid if they work together for the entire duration of the work?

A) Rs 30

B) Rs 20

C) Rs 50

D) Rs 40

8. A and B undertake a piece of work for Rs. 100. A can do it in 5 days and B can do it in 10 days. With the help of C, they finish it in 2 days. How much should C be paid for his contribution?

A) Rs. 40

B) Rs. 20

C) Rs. 60

D) Rs. 30

9. 4 men and 3 women finish a job in 6 days, and 5 men and 7 women can do the same job in 4 days. How long will one man and one woman take to do the work?

A) $156/7$ days

B) $5\frac{1}{2}$ days

C) $58/7$ days

D) $27\frac{1}{22}$ days

10. 5 men and 3 boys can together cultivate a 23-acre field in 4 days and 3 men and 2 boys together can cultivate a 7-acre field in 2 days. How many boys will be needed together with 7 men, if they have to cultivate a 45-acre field in 6 days?

A) 2

B) 3

C) 4

D) 6

11. A building is under construction and the task of paving the blocks is given to a group of men. 40 men can finish the given task in 96 days, working 9 hours/day. If 48 men take up the assignment and commit to finish it in 45 days, how many hours will they need to work per day?

A) 24

B) 27

C) 16

D) 18

12. If A & B can do a job in 8 days and B & C can do the same job in 12 days. If A, B & C work together they can finish the job in 6 days. In how many days can A & C finish the job?

A) 8 days

B) 10 days

C) 12 days

D) 14 days

13. A can do a piece of work in 20 days. He works at it for 5 days and then B finishes it in 10 more days. In how many days will A and B together finish the work?

A) 8 days

B) 10 days

C) 12 days

D) 6 days

14. Louis can do a piece of work in 25 days and Clark can do it in 20 days. They work for 5 days and then Louis goes away. In how many more days will Clark finish the work?

A) 10 days

B) 12 days

C) 14 days

D) 11 days

15. Twenty workers can finish a piece of work in 30 days. After how many days should 5 workers leave the job so that the work is completed in 35 days?

A) 5 days

B) 10 days

C) 15 days

D) 20 days

16. Gabbar and Mogambo together can do a piece of work in 7 days. If Gabbar does twice as much work as Mogambo in a given time, how long will Gabbar alone take to do the work?

A) 6.33 days

B) 10.5 days

C) 11 days

D) 72 days

17. The ratio of efficiencies of P, Q and R is 2 : 3 : 4. While P and R work on alternate days, Q works on all days. The work is completed in 10 days and the total amount they get is Rs. 1200. Find the amount earned by each person (respectively).

A) 200, 600, 400

B) 400, 600, 200

C) 600, 200, 400

D) 400, 200, 600

18. Bruce can copy 50 pages in 10 hours. Bruce and Robin together can copy 300 pages in 40 hours. In how much time can Robin copy 30 pages?

A) 13 hours

B) 12 hours

C) 11 hours

D) 9 hours

19. There are 720 boxes. A & B can paint them in 20 days, B & C can paint them in 24 days, A & C in 15 days. If A paints for 4 days, B for 8 days and C for 8 days, how many boxes will be painted?

A) 252

B) 516

C) 348

D) 492

20. Sansa can do a piece of work in 10 days, Arya in 12 days and Bran in 15 days. They all start the work together, but Sansa leaves after 2 days and Arya leaves 3 days before the work is completed. In how many days is the work completed?

A) 2 days

B) 6 days

C) 7 days

D) 8 days

21. Two pipes can fill the cistern in 10 hours and 12 hours respectively, while the third empties it in 20 hours. If all the pipes are opened simultaneously, then the cistern will be filled in

A) 9 hours

B) 8.5 hours

C) 8 hours

D) 7.5 hours

22. A cistern is normally filled in 5 hours. However, it takes 6 hours when there is a leak in its bottom. If the cistern is full, in what time can the leak empty half of it?

A) 6h

B) 5h

C) 30h

D) 15h

23. Two taps are running continuously to fill a tank. The first tap could have filled it in 5 hours by itself and the second one by itself could have filled it in 20 hours. But the operator failed to realize that there was a leak in the tank from the beginning which caused a delay of one hour in the filling of the tank. Find the time in which the leak would empty a filled tank?

A) 15 hours

B) 20 hours

C) 25 hours

D) 40 hours

24. Two pipes can fill a tank in 20 and 24 minutes respectively and a waste pipe can empty 3 gallons per minute. All the three pipes working together can fill the tank in 15 minutes. The capacity of the tank in gallons is

A) 100

B) 110

C) 120

D) 140

25. Three taps P, Q and R can fill a tank in 12 hours, 15 hours and 20 hours respectively. If P is open all the time and Q and R are open for one hour each alternately, starting with Q, then the tank will be full in how many hours?

A) 9 hours

B) 7 hours

C) 13 hours

D) 11 hours

EXTRA QUESTIONS:

26. A software programmer provider has been training its workforce in such a way that 36 programmers could write 36 software programs of similar nature in 36 hours. The company has received an order for getting 84 software programs of similar nature in 24 hours. How many additional programmers should the company employ for this project?

- A) 90 B) 126 C) 66 D) 44

27. A and B can do a piece of work in 45 days and 40 days respectively. They began to do the work together but A leaves after some days and then B completed the remaining work in 23 days. The number of days after which A left the work was

- A. 12 B. 11 C. 10 D. 9

28. A work is done by three person A, B and C. A alone takes 10 hours to complete a single product but B and C working together takes 4 hours, for the completion of the same product. If all of them worked together and completed 14 products, then how many hours have they worked for?

- A. 20 B. 28 C. 40 D. 54

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

- A. 15 min B. 20 min C. 25 min D. 30 min

30. A, B and C can do a piece of work in 20, 30 and 60 days respectively. In how many days can A do the work if he is assisted by B and C on every third day?

- A. 12 B. 15 C. 16 D. 18