

TIME AND WORK



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- A can do a work in 10 days. B can do same work in 20 days. How many days they will take if they start working together?





➤ **Time and Work Relationships to Remember**

Mentioned below are some important relationships related to time and work tricks that aspirants or students must know while preparing for any competitive exams. These relationships are indeed shortcuts that will help you to solve time and work questions faster and with ease.

➤ **Relationship between Men and Work.**

More men \Rightarrow can do \Rightarrow More work

Less men \Rightarrow can do \Rightarrow Less work

➤ **Relationship between Work and Time**

More work \Rightarrow takes \Rightarrow More Time

Less work \Rightarrow takes \Rightarrow Less Time

➤ **Relationship between Men and Time**

More men \Rightarrow can do in \Rightarrow Less Time

Less men \Rightarrow can do in \Rightarrow More Time

CHAIN RULE:-

Work Done = Time Taken \times Rate of Work

Rate of Work = $1 / \text{Time Taken}$

Time Taken = $1 / \text{Rate of Work}$

If a piece of work is done in x number of days, then the work done in one day = $1/x$

Total Work Done = Number of Days \times Efficiency

Efficiency and Time are inversely proportional to each other

$$\frac{M_1 \times D_1 \times H_1 \times E_1}{M_1 \times D_1 \times H_1 \times E_1} = \frac{W_1}{W_2}$$

TIME AND WORK

Q 1. A can do a piece of work in 5 days, B in 4 days and A, B and C together in 2 days. In what time would C do it alone?

(1) 25 days (2) 12 days (3) 15 days (4) 20 days (5) None of these

TIME AND WORK

Q 1. A can do a piece of work in 5 days, B in 4 days and A, B and C together in 2 days. In what time would C do it alone?

(1) 25 days (2) 12 days (3) 15 days **(4) 20 days** (5) None of these

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TIME AND WORK

Q 2. A and B finish a job in 12 days while A, B and C can finish it in 8 days. C alone will finish the job in :

(1) 20 days (2) 14 days (3) 24 days (4) 16 days (5) None of these

TIME AND WORK

Q 2. A and B finish a job in 12 days while A, B and C can finish it in 8 days. C alone will finish the job in :

(1) 20 days (2) 14 days **(3) 24 days** (4) 16 days (5) None of these

TIME AND WORK

Q 3. A can do a piece of work in 50 days and B in 40 days. They work together for 10 days and then A leaves B to finish the work alone. How long will B take to finish it?

(1) 11 days (2) 18 days (3) 22 days (4) 26 days (5) None of these

TIME AND WORK

Q 3. A can do a piece of work in 50 days and B in 40 days. They work together for 10 days and then A leaves B to finish the work alone. How long will B take to finish it?

(1) 11 days (2) 18 days **(3) 22 days** (4) 26 days (5) None of these

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Q 4. A can complete a work in 24 days and B can do the same work in 18 days. They work together if A after doing 4 days, leaves the work, find in how many days B will do the remaining work?

(1) 10 days (2) 12 days (3) 15 days (4) 16 days (5) None of these

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TIME AND WORK

Q 4. A can complete a work in 24 days and B can do the same work in 18 days. They work together if A after doing 4 days, leaves the work, find in how many days B will do the remaining work?

- (1) 10 days (2) 12 days (3) 15 days (4) 16 days **(5) None of these**

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Q 5. A and B can do a piece of work in 20 days and 30 days. Both starts the work together for some time, but B leaves the job 5 days before the work is completed. Find the time in which work is finished.

(1) 7 days (2) 12 days (3) 14 days (4) 16 days (5) None of these

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TIME AND WORK

Q 5. A and B can do a piece of work in 20 days and 30 days. Both starts the work together for some time, but B leaves the job 5 days before the work is completed. Find the time in which work is finished.

(1) 7 days (2) 12 days **(3) 14 days** (4) 16 days (5) None of these

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Q 6. A, B and C together can finish a piece of work in 12 days, A and C together work twice as much as B, A and B together work thrice as much as C. In what time (in days) could each do it separately?

(1) $28\frac{4}{5}$, 42, 48

(2) $28\frac{4}{5}$, 36, 48

(3) 28, $36\frac{4}{5}$, 48

(4) 28, 36, 48

(5) None of these

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TIME AND WORK

Q 6. A, B and C together can finish a piece of work in 12 days, A and C together work twice as much as B, A and B together work thrice as much as C. In what time (in days) could each do it separately?

(1) $28\frac{4}{5}$, 42, 48

(2) $28\frac{4}{5}$, 36, 48

(3) 28, $36\frac{4}{5}$, 48

(4) 28, 36, 48

(5) None of these

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Q 7. A is twice as fast as B, and is therefore able to finish a work in 30 days less than B. Find the time in which they can do it working together.

(1) 18 days (2) 20 days (3) 24 days (4) 22 days (5) None of these

TIME AND WORK

Q 7. A is twice as fast as B, and is therefore able to finish a work in 30 days less than B. Find the time in which they can do it working together.

(1) 18 days (2) 20 days (3) 24 days (4) 22 days (5) None of these

TIME AND WORK

Q 8. A and B can finish a piece of work in 30 days, B and C in 40 days while C and A in 60 days. How long will they take to finish it together?

- (1) $26\frac{2}{3}$ days (2) $16\frac{2}{3}$ days (3) 25 days (4) 24 days (5) None of these

TIME AND WORK

Q 8. A and B can finish a piece of work in 30 days, B and C in 40 days while C and A in 60 days. How long will they take to finish it together?

- (1) $26\frac{2}{3}$ days** (2) $16\frac{2}{3}$ days (3) 25 days (4) 24 days (5) None of these

TIME AND WORK

Q 9. A can do a work in 20 days. B takes 5 days to complete it. C takes as long as A and B would take working together. How long will it take A, B and C to complete the work together?

(1) 2 days (2) 4 days (3) 3 days (4) 6 days (5) None of these

TIME AND WORK

Q 9. A can do a work in 20 days. B takes 5 days to complete it. C takes as long as A and B would take working together. How long will it take A, B and C to complete the work together?

(1) 2 days (2) 4 days (3) 3 days (4) 6 days (5) None of these

TIME AND WORK

Q 10. A and B can together finish a work in 30 days. They worked for it for 20 days and then B left. The remaining work was done by A alone in 30 days. A alone can finish the work in :

(1) 54 days (2) 60 days (3) 48 days (4) 50 days (5) None of these

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TIME AND WORK

Q 10. A and B can together finish a work in 30 days. They worked for it for 20 days and then B left. The remaining work was done by A alone in 30 days. A alone can finish the work in :

(1) 54 days (2) 60 days (3) 48 days (4) 50 days **(5) None of these**

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TIME AND WORK

Q 11. A, B and C can do a piece of work in 10, 12 and 15 days respectively, they start working together but C leaves after working 3 days and B, 4 days before the completion of work. In how many days the work was finished?

(1) $6\frac{2}{11}$ days (2) 7 days (3) $7\frac{2}{15}$ days (4) $6\frac{2}{5}$ (5) None of these

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TIME AND WORK

Q 11. A, B and C can do a piece of work in 10, 12 and 15 days respectively, they start working together but C leaves after working 3 days and B, 4 days before the completion of work. In how many days the work was finished?

(1) $6\frac{2}{11}$ days (2) 7 days (3) $7\frac{2}{15}$ days (4) $6\frac{2}{5}$ (5) None of these

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TIME AND WORK

Q 12. A, B and C can do a piece of work in 5, 8 and 10 days respectively, they start working together but C leaves after working 2 days and B, 1 days before the completion of work. In how many days the work was finished?

(1) 3 days (2) $6\frac{1}{17}$ days (3) $3\frac{2}{7}$ days (4) $2\frac{11}{13}$ days (5) None of these

TIME AND WORK

Q 12. A, B and C can do a piece of work in 5, 8 and 10 days respectively, they start working together but C leaves after working 2 days and B, 1 days before the completion of work. In how many days the work was finished?

(1) 3 days (2) $6\frac{1}{17}$ days (3) $3\frac{2}{7}$ days (4) $2\frac{11}{13}$ days (5) None of these

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TIME AND WORK

Q 13. A can do a certain work in the same time in which B and C together can do it. If A and B together could do it in 10 days and C alone in 50 days, in what time could B alone do it?

(1) 25 days (2) 30 days (3) 24 days (4) 20 days (5) None of these

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TIME AND WORK

Q 13. A can do a certain work in the same time in which B and C together can do it. If A and B together could do it in 10 days and C alone in 50 days, in what time could B alone do it?

(1) 25 days (2) 30 days (3) 24 days (4) 20 days (5) None of these

TIME AND WORK

Q 14. A started a work and left after working for 4 days. Then B was called and he finished the work in 18 days. Had A left the work after working for 6 days, B would have finished the remaining work in 12 days. In how many days can each of them, working alone, finish the whole work?

- (1) 5 days, 20 days (2) 10 days, 30 days (3) 15 days, 30 days (4) 5 says, 30 days
(5) None of these

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TIME AND WORK

Q 14. A started a work and left after working for 4 days. Then B was called and he finished the work in 18 days. Had A left the work after working for 6 days, B would have finished the remaining work in 12 days. In how many days can each of them, working alone, finish the whole work?

- (1) 5 days, 20 days (2) 10 days, 30 days (3) 15 days, 30 days (4) 5 says, 30 days
(5) None of these

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TIME AND WORK

Q 15. A alone would take 27 hours more to complete the job than if both A and B would together. If B worked alone, he took 3 hours more to complete the job than A and B worked together. What time, would they take if both A and B worked together?

(1) 8 hours (2) 10 hours (3) 9 hours (4) 6 hours (5) None of these

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TIME AND WORK

Q 15. A alone would take 27 hours more to complete the job than if both A and B would together. If B worked alone, he took 3 hours more to complete the job than A and B worked together. What time, would they take if both A and B worked together?

(1) 8 hours (2) 10 hours **(3) 9 hours** (4) 6 hours (5) None of these

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TIME AND WORK

Q 16. A and B together can do a piece of work in 12 days which B and C together can do in 16 days. After A has been working at it for 5 days, and B for 7 days. C finishes it in 13 days. In how many days could each do the work by himself?

- (1) 16, 48 and 26 days respectively
- (2) 16, 48 and 24 days respectively
- (3) 26, 48 and 24 days respectively
- (4) 16, 46 and 24 days respectively
- (5) None of these

TIME AND WORK

Q 16. A and B together can do a piece of work in 12 days which B and C together can do in 16 days. After A has been working at it for 5 days, and B for 7 days. C finishes it in 13 days. In how many days could each do the work by himself?

- (1) 16, 48 and 26 days respectively
- (2) 16, 48 and 24 days respectively**
- (3) 26, 48 and 24 days respectively
- (4) 16, 46 and 24 days respectively
- (5) None of these

TIME AND WORK

Q 17. Two women, Ganga and Jamuna, working separately can mow a field in 8 and 12 hours respectively. If they work for an hour alternately, Ganga beginning at 9 am, when will the mowing be finished?

(1) 6 : 30 pm (2) 8 : 30 pm (3) 6 : 30 am (4) 7 : 30

(5) None of these

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TIME AND WORK

Q 17. 8 men can do a piece of work in 5 days. How many men are needed to complete the work in 10 days?

(1) 8 men (2) 4 men (3) 2 men (4) 3 men (5) None of these

TIME AND WORK

Q 18. 20 men can prepare 40 toys in 24 days working 18 yours a day. Then in how many days can 6 men prepare 48 toys working 16 hrs. a day?

(1) 16 days (2) 12 days (3) 21 days (4) 18 days (5) None of these

TIME AND WORK

Q 18. 20 men can prepare 40 toys in 24 days working 18 yours a day. Then in how many days can 6 men prepare 48 toys working 16 hrs. a day?

(1) 16 days (2) 12 days (3) 21 days (4) 18 days (5) None of these

TIME AND WORK

Q 19. 10 men can complete a piece of work in 15 days and 15 women and complete the same work in 12 days. If all the 10 men and 15 women work together, in how many days will the work get completed?

- (1) 6 (2) $7\frac{2}{3}$ (3) $6\frac{2}{3}$ (4) $6\frac{1}{3}$
(5) None of these

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TIME AND WORK

Q 19. 10 men can complete a piece of work in 15 days and 15 women and complete the same work in 12 days. If all the 10 men and 15 women work together, in how many days will the work get completed?

- (1) 6 (2) $7\frac{2}{3}$ (3) $6\frac{2}{3}$ (4) $6\frac{1}{3}$
(5) None of these

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TIME AND WORK

Q 20. 8 men and 4 boys working together can do 6 times as much work per hour as a man and a boy together. Compare the work of a man with that of a boy.

- (1) 2 : 1 (2) 3 : 1 (3) 1 : 1 (4) 1 : 2 (5) None of these

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TIME AND WORK

Q 20. 8 men and 4 boys working together can do 6 times as much work per hour as a man and a boy together. Compare the work of a man with that of a boy.

- (1) 2 : 1 (2) 3 : 1 **(3) 1 : 1** (4) 1 : 2 (5) None of these

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TIME AND WORK

Q 21. If 3 men or 5 women can reap a field in 43 days, how long will 5 men and 6 women take to reap it?

(1) 15 days (2) 25 days (3) 18 days (4) 12 days (5) None of these

TIME AND WORK

Q 21. If 3 men or 5 women can reap a field in 43 days, how long will 5 men and 6 women take to reap it?

(1) 15 days (2) 25 days (3) 18 days (4) 12 days (5) None of these

TIME AND WORK

Q 22. 2 men or 3 women or 4 boys can do a work in 52 days. Then in how many days will 1 man, 1 woman and 1 boy do the work?

(1) 24 days (2) 42 days (3) 36 days (4) 48 days (5) None of these

TIME AND WORK

Q 22. 2 men or 3 women or 4 boys can do a work in 52 days. Then in how many days will 1 man, 1 woman and 1 boy do the work?

(1) 24 days (2) 42 days (3) 36 days **(4) 48 days** (5) None of these

TIME AND WORK

Q 23. 1 man or 3 women or 4 boys can do a work in 38 days. Then in how many days will 1 man, 1 woman and 1 boy do the work?

(1) 24 days (2) 12 days (3) 18 days (4) 36 days (5) None of these

TIME AND WORK

Q 23. 1 man or 3 women or 4 boys can do a work in 38 days. Then in how many days will 1 man, 1 woman and 1 boy do the work?

(1) 24 days (2) 12 days (3) 18 days (4) 36 days (5) None of these

TIME AND WORK

Q 24. A certain number of men can do a work in 45 days. If there were 4 men less it could be finished in 15 days more. How many men are there?

(1) 28 men (2) 16 men (3) 24 men (4) 20 men (5) None of these

TIME AND WORK

Q 24. A certain number of men can do a work in 45 days. If there were 4 men less it could be finished in 15 days more. How many men are there?

(1) 28 men (2) 16 men (3) 24 men (4) 20 men (5) None of these

TIME AND WORK

Q 25. A group of men can do a work in 15 days, but 2 of them became absent. If the rest of the group did the work in 25 days, find the original number of men.
(1) 5 men (2) 4 men (3) 7 men (4) 6 men (5) None of these

TIME AND WORK

Q 25. A group of men can do a work in 15 days, but 2 of them became absent. If the rest of the group did the work in 25 days, find the original number of men.
(1) 5 men (2) 4 men (3) 7 men (4) 6 men (5) None of these

TIME AND WORK

Q 26. A certain number of men can do a work in 50 days. If there were 3 men more it could be finished in 5 days less. How many men are there?

(1) 36 men (2) 18 men (3) 27 men (4) 30 men (5) None of these

TIME AND WORK

Q 26. A certain number of men can do a work in 50 days. If there were 3 men more it could be finished in 5 days less. How many men are there?

(1) 36 men (2) 18 men **(3) 27 men** (4) 30 men (5) None of these

TIME AND WORK

Q 27. A builder decided to build a farmhouse in 45 days. He employed 150 men in the beginning and 120 more after 30 days and completed the construction in stipulated time. If he had not employed the additional men, how many days behind schedule would it have been finished?

(1) 12 days (2) 10 days (3) 15 days (4) 8 days (5) None of these

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TIME AND WORK

Q 27. A builder decided to build a farmhouse in 45 days. He employed 150 men in the beginning and 120 more after 30 days and completed the construction in stipulated time. If he had not employed the additional men, how many days behind schedule would it have been finished?

(1) 12 days (2) 10 days (3) 15 days (4) 8 days (5) None of these

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TIME AND WORK

Q 28. There is a sufficient food for 300 men for 32 days. After 29 days, 210 men leave the place. For how many days will the rest of the food last for the rest of the men?

(1) 12 days (2) 14 days (3) 15 days (4) 10 days (5) None of these

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TIME AND WORK

Q 28. There is a sufficient food for 300 men for 32 days. After 29 days, 210 men leave the place. For how many days will the rest of the food last for the rest of the men?

(1) 12 days (2) 14 days (3) 15 days (4) 10 days (5) None of these

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TIME AND WORK

Q 29. There is a sufficient food for 150 men for 15 days. After 10 days, 75 men leave the place. For how many days will the rest of the food last for the rest of the men?

(1) 10 days (2) 8 days (3) 5 days (4) 15 days (5) None of these

TIME AND WORK

Q 29. There is a sufficient food for 150 men for 15 days. After 10 days, 75 men leave the place. For how many days will the rest of the food last for the rest of the men?

(1) 10 days (2) 8 days (3) 5 days (4) 15 days (5) None of these

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TIME AND WORK

Q 30. A team of 20 men is supposed to do a work in 30 days. After 12 days, 5 more men were employed and the work finished 2 days earlier. In how many days would it have been finished if 5 more men were not employed?

(1) 30 days (2) 28 days (3) 32 days (4) 34 days (5) None of these

TIME AND WORK

Q 30. A team of 20 men is supposed to do a work in 30 days. After 12 days, 5 more men were employed and the work finished 2 days earlier. In how many days would it have been finished if 5 more men were not employed?

(1) 30 days (2) 28 days **(3) 32 days** (4) 34 days (5) None of these

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TIME AND WORK

Q 31. 30 men, working 4 hours a day can do a piece of work in 10 days. Find the number of days in which 45 men working 8 hrs a day can do twice the work. Assume that 2 men of the first group do as much work in 2 hour as 4 men of the second group do in 1 hr.

(1) $6\frac{1}{3}$ days (2) $6\frac{2}{3}$ days (3) $5\frac{3}{6}$ days (4) $3\frac{1}{6}$ days (5) None of these

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TIME AND WORK

Q 31. 30 men, working 4 hours a day can do a piece of work in 10 days. Find the number of days in which 45 men working 8 hrs a day can do twice the work. Assume that 2 men of the first group do as much work in 2 hour as 4 men of the second group do in 1 hr.

(1) $6\frac{1}{3}$ days (2) $6\frac{2}{3}$ days (3) $5\frac{3}{6}$ days (4) $3\frac{1}{6}$ days (5) None of these

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THANK YOU

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