Time and Work

A. Choose the Correct Answer:

complete it in 6 days.

the wall.

take.

| <i>,</i> | Chicose the Correct / miswerr | | |
|---|---|--------------------------------------|---------|
| | 1. If 6 men can complete a work i | in 12 days, how many days will 3 men | take to |
| | complete the same work? | | |
| | a) 6 days | b) 18 days | |
| | c) 24 days | d) 12 days | |
| 2. If 8 workers finish a task in 15 days, then 4 workers will finish it in: | | | |
| | a) 30 days | b) 60 days | |
| | c) 15 days | d) 20 days | |
| 3. Time taken is proportional to number of workers. | | | |
| | a) Directly | b) Inversely | |
| | c) Not related | d) Constantly | |
| 4. | If 5 men take 20 days to do a piece of work, then 10 men will take: | | |
| | a) 10 days | b) 5 days | |
| | c) 20 days | d) 40 days | |
| | 5. Which of the following statements is true for time and work? | | |
| | a) More workers, more time | b) Less workers, less time | |
| | c) More workers, less time | d) Workers and time are not related | |
| В. | Write the Missing Terms to Complete the Sentences: | | |
| | 1. In time and work problems, work is to number of days. | | |
| | 2. If number of workers increases, the time taken to complete work | | |
| | 3. If 4 men can do a work in 10 day | s, then 8 men will do it in | days. |
| | 4. More men employed means | time to finish the same work. | |
| | 5. Work × Time = for c | constant work. | |
| C. | Figure out the answers to these | questions: | |
| | 1. 12 men can complete a proje | ect in 8 days How many men are ne | eded to |

2. If 15 men can paint a wall in 10 days, how many days will 5 men take to paint

3. A team of 5 workers can build a wall in 20 days How many days will 10 workers

- 4. 8 workers can complete a job in 24 days How many days will 12 workers take to finish the same job.
- 5. If 6 men can do a work in 18 days, how many men are needed to complete the work in 9 days.

D. Mark each sentence with a True (\checkmark) or False (X):

| 1. Time and number of workers are in inverse proportion. | |
|--|--|
| 2. If workers double, time becomes half. | |
| 3. Less workers take less time to complete the work. | |
| 4. Work done is directly proportional to the number of days taken. | |
| 5. If time is doubled, work is halved | |

E. Challenge yourself with these questions:

- 1. If 9 men can complete a work in 15 days, in how many days will 3 men complete the same work.
- 2. 7 workers can build a road in 21 days How many days will 14 workers take.
- 3. If 5 men complete a work in 30 days, how many men are needed to complete the same work in 15 days.
- 4. 12 men complete a work in 18 days How many days would 6 men take.
- 5. If 10 workers can complete a job in 12 days, how many days will 5 workers take.