

MATHS

BOOKS - ARIHANT PUBLICATION BIHAR

TIME AND WORK

Solved Examples

1. Raj can do a piece of work in 20 days and Rohan can do it in 12 days. How long will they

take, if both work together?

A. 5 days

B. $6\frac{1}{2}$ days

C. $7\frac{1}{2}$ days

D. 8 days

Answer: C



2. A and B can do a piece of wok in 72 days, B and C can do it in 120 days, A and C can do it in 90 days. In what time can A alone do it?

- A. 55 days
- B. 120 days
- C. 110 days
- D. 60 days

Answer: B



3. If 3 men or 4 women can reap a field in 43 days, how long will 7 men and 5 women take to reap it?

- A. 24 days
- B. 10 days
- C. 5 days
- D. 12 days

Answer: D



4. Pipe A can fill a tank in 36 minutes and pipe B can fill it in 45 minutes. If both the pipes are opened to fill an empty tank, in how many minutes will it be full?

- A. 20 h
- B. 10 h
- C. 15 h
- D. 12 h

Answer: A



5. Two pipes A and B can fill a tank in 36 min and 45 min, respectively. A pipe 'C' can empty the tank in 30 min. If all the three pipes are opened simultaneously, then in how much time the tank will be completely filled?

A. 6 h

B. 1 h

C. 3 h

D. 4 h

Answer: B



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Exam Booster For Cracking Exam

1. A can do a piece of work in 24 days. If B is 60% more efficient than A, then how many days does B require to do the same work?

A. 17 days

B. 18 days

C. 15 days

D. 12 days

Answer: C



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2. A sum of money is sufficient to pay A's wages for 21 days and B's wages for 28 days.

The same money is sufficient to pay the wages of both for

- A. 22 days
- B. 26 days
- C. $24\frac{1}{2}$ days
- D. 12 days

Answer: D



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3. A cistern which has a leak in the bottom is filled in 15 h. Had there been no leak it can be

filled in 12 h. If the cistern is full, the leak can empty it in

A. 20 h

B. 60 h

C. 45 h

D. 46 h

Answer: B



4. 24 men can complete a job in 40 days. The number men required to complete the job in 32 days is :

A. 32 men

B. 30 men

C. 35 men

D. 36 men

Answer: B



5. A can finish a work in 12 days and B can do it in 15 days. 'After A had worked for 3 days, B also joined A to finish the remaining work. In how many days, the remaining work will be finished?

- A. 5
- B. $5\frac{1}{2}$ C. $4\frac{1}{2}$
- D. 6

Answer: A

6. If a work can be completed by A in 30 days and by B in 60 days. Then, the number of days taken by them to complete the work, working together is

- A. 25 days
- B. 45 days
- C. 50 days
- D. 20 days

Answer: D



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7. If x men can do a work in z days. Then, the number of days taken by (x + y) men to do this is

A.
$$\frac{xy}{(x+z)}$$

$$\mathsf{B.}\,\frac{xz}{(x+y)}$$

$$\mathsf{C.}\,\frac{z(x+y)}{x}$$

D.
$$\frac{x(x+y)}{z}$$

Answer: B



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8. A and B can complete a task in 30 days when working together after A and B have been working together for 11 days, B is called away and A, all by himself completes the task in the next 28 days. Had A been working alone, the number of days taken by him to complete the task would have been:

A.
$$47\frac{3}{11}$$

B.
$$42\frac{1}{9}$$

C.
$$53\frac{7}{11}$$

D.
$$44\frac{4}{19}$$

Answer: D



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9. 9 men finish one-third work in 10 days. The number of additional men required for finishing the remaining work in 2 more days will be

A. 78

B. 81

C. 55

D. 30

Answer: B



10. Ravi alone does a piece of work in 2 days and Rajesh does it in 6 days. In how many days will the two do it together?

- A. 1 day
- B. $\frac{1}{2}$ day
- C. $1\frac{1}{2}$ days
- D. None of these

Answer: C



11. X can do $\frac{3}{4}$ of a work in 12 days. In how many days X can finish the 1/2 work?

- A. 8 days
- B. 7 days
- C. 6 days
- D. None of these

Answer: A



12. Ravi can build a wall in the same time in which Mahesh and Suresh together do it. If Ravi and Mahesh together could do it in 10 days and Suresh alone in 15 days. In what time Mahesh alone do it?

- A. 50 days
- B. 60 days
- C. 59 days
- D. None of these

Answer: B

13. Sita can do a work in 15 days and Gita can do it in 25 days and Meera in 30 days. How long will they take to do the work, if they work together?

- A. 7 days
- B. 6 days
- C. 7/50 days
- D. None of these

Answer: D



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14. 7 men and 8 boys can do a piece of work in 2 days. 4 men and 12 boys can do 29/56 of the same work in 1 day, in how many days will 1 man do this work?

- A. 28 days
- B. 26 days
- C. 50 days

D. None of these

Answer: A



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15. 2 men undertake to do a job for 1400. One can do it alone in 7 days and the other in 8 days. With the assistance of a boy they finish the work in 3 days. How should the money be divided?

A. Rs. 600, Rs. 525, Rs. 275

B. Rs. 600, Rs. 275, Rs. 525

C. Rs. 525, Rs. 600, Rs. 275

D. None of these

Answer: A



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16. A group of workers engaged in plastering a wall, completed half of the work in one day and $\frac{1}{4}th$ of the remaining work the next day. If

still $45m^2$ of wall remained to be plastered.

What was the area of the wall?

- A. 125 m^2
- B. 125 cm^2
- $C. 120 \text{ m}^2$
- D. 120 cm^2

Answer: C



17. A can do a piece of work in 9 days, B in 12 days and C in 15 days. They undertake to complete a job for 7050. If the wages are divided proportional to the work done, the share of A (in) is

- A. Rs. 7050
- B. Rs. 3000
- C. Rs. 180
- D. None of these

Answer: B

18. A, B and C are three taps in a tank. Taps A and B can fill the tank independently in 20 min and 40 min, respectively. Tap C can empty the tank in 60 min. If all the three taps are opened together, how long will they take to fill the tank?

A. 17 min

B. $17\frac{1}{2}$ min

C. $17\frac{1}{7}$ min

D. None of these

Answer: C

