Previous Year Topic-wise SSC CGL 2022

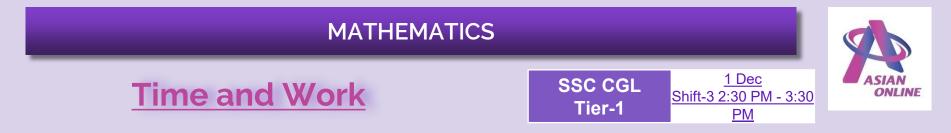
Smart Practice Question Series

MATHEMATICS Chapter 12 : Time and Work

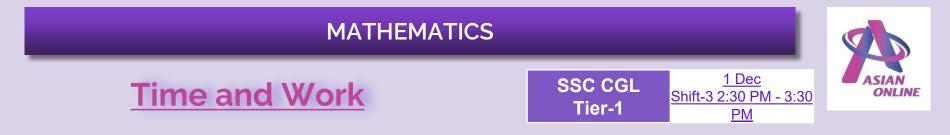




A, B and C can complete a piece of work separately in 10, 20 and 40 days, respectively. In how many days will the work be completed if A is assisted by both B and C every third day?
 A. 8²/₇
 B. 9
 C. 10²/₃
 D. 6



- 2. If 450 men can finish construction of an apartment in 20 days, then how many men are needed to complete the same work in 30 days?
 - **A**. 150
 - **B**. 300
 - **C**. 400
 - D. 250



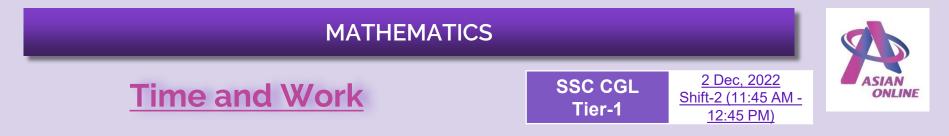
- 3. A takes 4 times as much time as B or 5 times as much time as C to finish a piece of work. Working together, they can finish the work in 4 days. B can do the work alone in:
 - A. 10 days
 - B. 15 days
 - C. 12 days
 - D. 20 days



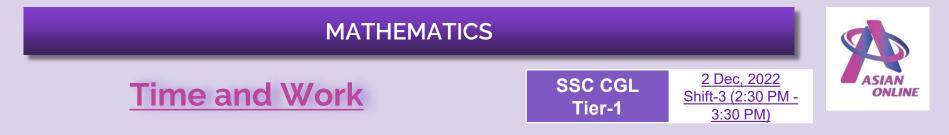
- 4. 6 men and 8 women can do a piece of work in 10 days, whereas 26 men and 48 women can do the same work in 2 days. What will be the time taken by 15 men and 20 women to do the same work?
 - A. 6 days
 - B. 10 days
 - C. 4 days
 - D. 8 days



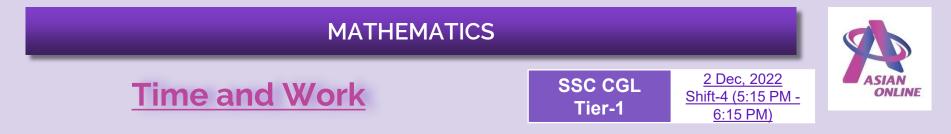
- 5. If 6 women can complete a work in 3 days, and 9 girls can complete the same work in 2 days, then find the time taken to complete the same work by 8 women and 6 girls?
 - A. 3 days
 - B. 4 days
 - C. 6 days
 - D. 9/7 days



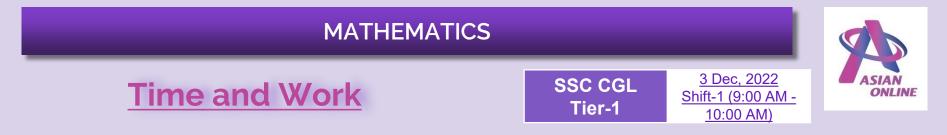
- 6. A takes twice as much time as B and thrice as much time as C to finalise a task. Working together, they can complete the task in 8 days. The time (in days) taken by A, B and C, respectively, to complete the task is:
 - A. 42, 21, 14
 - B. 60, 30, 20
 - C. 54, 27, 18
 - D. 48, 24, 16



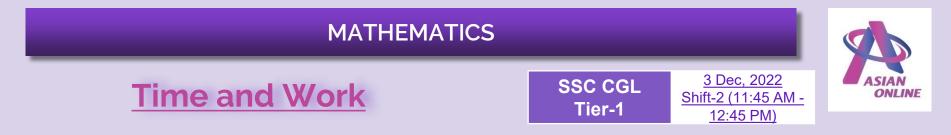
- 7. If one man or two women or four boys or five girls can finish a work in 39 days, then how many days will one man, one woman, one boy and one girl together take to finish the same work?
 - A. 40
 - **B**. 10
 - C. 30
 - D. 20



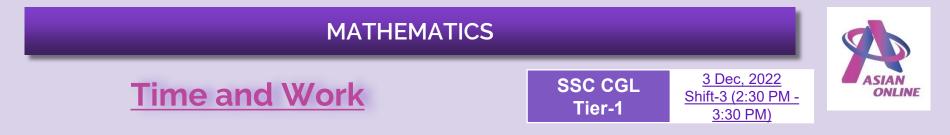
- 8. A and B together can do a piece of work in 50 days. If A is 40% less efficient than B, in how many days can A working alone complete 60% of the work?
 - A. 70
 - **B**. 110
 - **C**. 80
 - D. 105



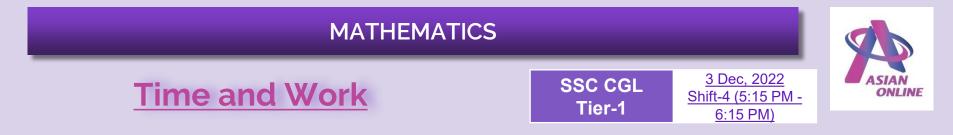
- 9. Ruchi, Khushi and Teju can do a piece of work in 30, 40 and 60 days respectively. In how many days can Ruchi do the work, if she is assisted by both Khushi and Teju on every third day?
 - A. 550/12 days
 - B. 85/4 days
 - C. 71/2 days
 - D. 360/17 days



- 10. A and B can do a certain work in 6 hours, and A, B and C together take 4 hours to do the same. How long will it take for C alone to accomplish the task?
 - A. 12 hours
 - B. 4 hours
 - C. 2 hours
 - D. 6 hours



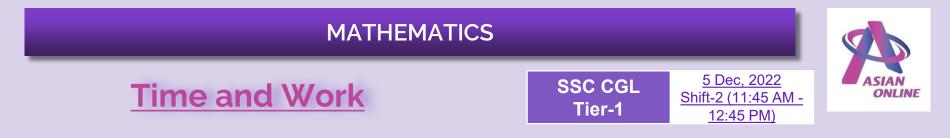
- 11. 5 men and 8 women can complete a work in 12 days working together, while 3 men and 7 women together can complete the same work in 15 days. In how many days will 11 women complete the same work?
 - A. 12
 - **B**. 8
 - C. 6
 - **D**. 16



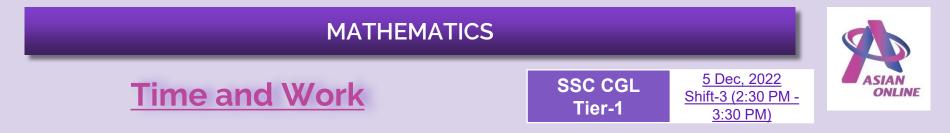
12. A and B working separately can complete a piece of work in 10 and 16 days, respectively. If they work for a day alternately, with A beginning the work, in how many day(s) will the work be completed?

A.
$$10\frac{1}{4}$$

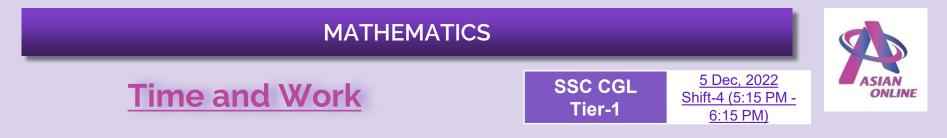
B. $12\frac{1}{4}$
C. $1\frac{1}{4}$
D. $\frac{1}{4}$



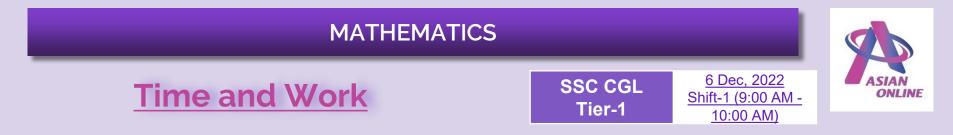
- 13. A contractor decided to complete a work in 80 days and employed 60 men at the beginning and 20 men additionally after 20 days and got the work completed as per schedule. If he had not employed the additional men, how many extra days would he have needed to complete the work (round off to the nearest integer)?
 - A. 32 days
 - B. 20 days
 - C. 30 days
 - D. 26 days



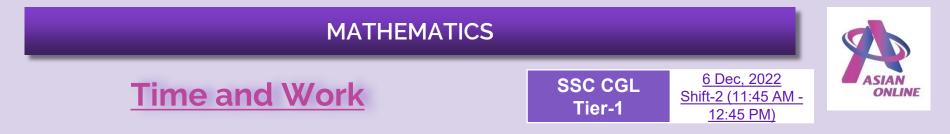
- 14. 40 men can complete a work in 15 days. Three days after they started working, 20 more men joined them. In how many days the total work will be completed?
 - A. 12
 - **B**. 13
 - C. 11
 - **D**. 10



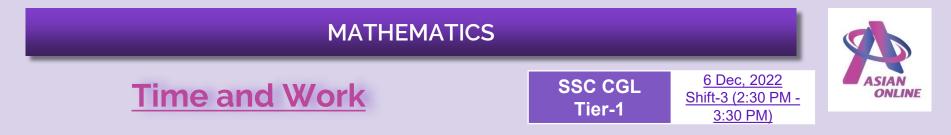
- 15. There are 3 taps A, B, and C in a tank. These can fill the tank in 10 hours, 20 hours and 25 hours, respectively. At first, all three taps are opened simultaneously. After 2 hours, tap C is closed and A and B keep running. After 4 hours from the beginning, tap B is also closed. The remaining tank is filled by tap A alone. Find the percentage of work done by tap A itself.
 - A. 32%
 - **B**. 75%
 - C. 52%
 - D. 72%



- 16. A, B and C can do a piece of work in 11 days, 20 days and 55 days respectively. If B works daily and is supported by A and C on alternate days beginning with A, then in how many days will the work be finished?
 - A. 10
 - B. $9\frac{1}{3}$
 - C. 12
 - D. 8



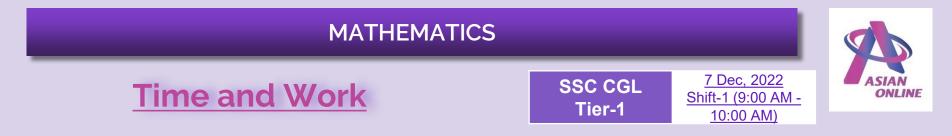
- 17. A group of men decided to do a job in 6 days, but 18 men dropped out every day. If the job was completed in 8 days, then how many men initially decided to do the job.
 - A. 300
 - **B**. 252
 - C. 188
 - **D**. 150



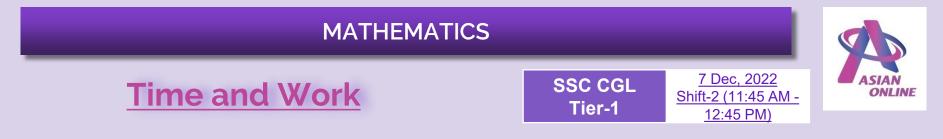
- 18. A and B can complete a piece of work in 10 and 16 days respectively. A begins to do the work and they work alternatively one at a time for one day each. The whole work will be completed in :
 - A. $12\frac{1}{4}$ days B. $12\frac{1}{4}$ days C. $12\frac{1}{4}$ days D. $12\frac{1}{4}$ days



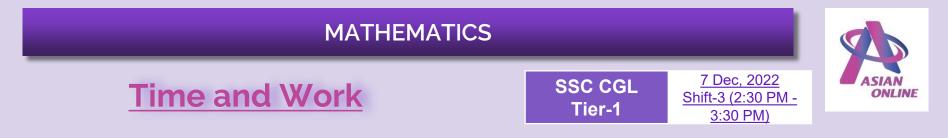
- 19. 1 man and 4 women can complete a work in $\frac{65}{4}$ days, while 3 men and 4 woman can complete it in $\frac{13}{2}$ days. In how many days will 13 women complete the same?
 - **A**. 20
 - **B**. 16
 - C. 14
 - **D**. 18



- 20. 25 men and 45 women can complete a piece of work in 15 days, while 15 men and 60 women can complete it in 20 days. In how many days can 69 men and 67 women complete the work?A. 10
 - B. 5
 - C. 8
 - D. 6



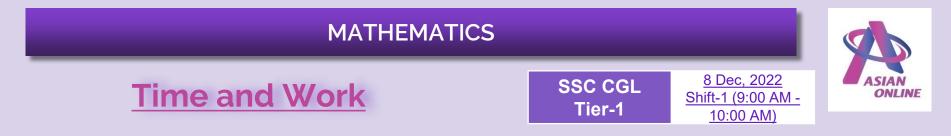
- 21. In a partnership firm two partners, Vijay and Praveen are working on an assignment. It will take 12 weeks for Vijay to complete the entire assignment alone, while Praveen will take 8 weeks to complete it alone. Due to work pressure, they decided to work on that assignment on the alternate week basis. In the first week Praveen will work and in the second week Vijay will work and so on. In how many weeks the work will be completed if they work on alternate week basis?
 - A. 8
 - **B**. 8.5
 - C. 9.5
 - D. 9



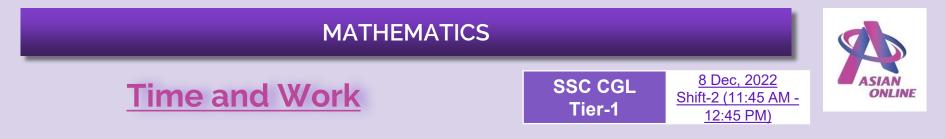
- 22. A civil contractor planned to build an over bridge of 3 km distance in 600 days. For this purpose, he employed 90 workers. After 200 days of work, it was observed that only 0.5 km of the bridge was completed. What is the number of extra workers required to complete the work in time?
 - A. 100
 - **B**. 140
 - C. 125
 - **D**. 135



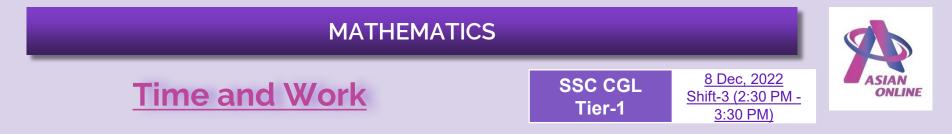
- 23. 12 men and 12 women can complete a piece of work in 9 days. 6 men and 15 women can complete the same work in 12 days. How long (in days) would it take 9 women to complete half the work?
 - A. 36
 - **B**. 12
 - C. 18
 - D. 24



- 24. Ten men begin to do a work. But after some days, four of them left the job. As a result, the job that could have been completed in 40 days is completed in 50 days. How many days after the commencement of the work did the four men leave?
 - A. 30
 - **B**. 20
 - C. 35
 - D. 25



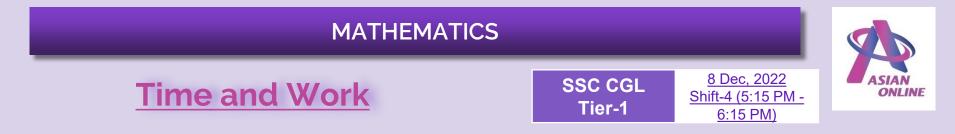
- 25. In a factory, Ajay and Vijay work on the same machine to cut diamonds but on alternate hour basis. Ajay works for the first hour and then Vijay works for the second hour and so on. Ajay can complete the work in 6 hours, while Vijay completes it in 16 hours if they work individually. In how much time can they complete the work if they are using the machine on alternate basis?
 - A. 8 h 30 min
 - B. 8 h
 - C. 9 h
 - D. 9 h 30 min



26. Raju, Sunil and Vishal can separately finish a work in 20, 30 and 40 days, respectively. In how many days Raju can finish the work, if he is assisted by Sunil and Vishal on alternate days, starting with Sunil?

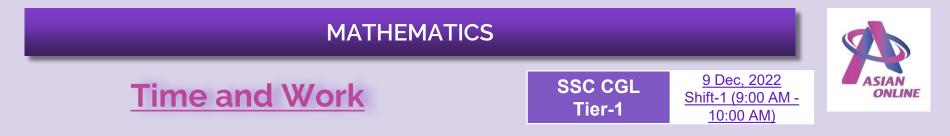
A.
$$12\frac{3}{5}$$

B. $12\frac{1}{20}$
C. $11\frac{1}{20}$
D. $11\frac{3}{5}$

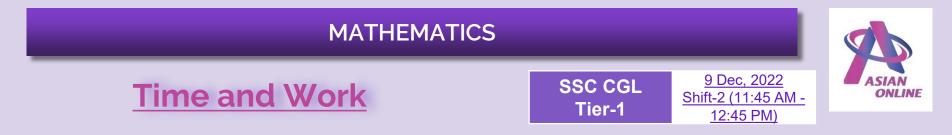


27. A and B can complete a piece of work in 13 and 17 days respectively. A begins to do the work, and they work alternatively one at a time for one day each. The whole work will be completed in:

A. 17¹¹/₁₇ days
B. 17¹⁷/₁₉ days
C. 14¹¹/₁₇ days
D. 11¹¹/₁₇ days



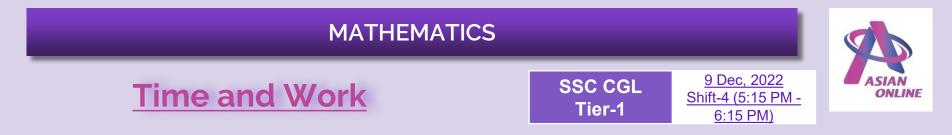
- 28. Anshu, Swati and Rajni can finish a work in 4 days if they work together. However, Anshu alone will take 9 days to complete the work, and Swati alone will complete the work in 12 days. How many days will Rajni alone take to complete the work?
 - A. 18
 - **B**. 12
 - C. 24
 - **D**. 16



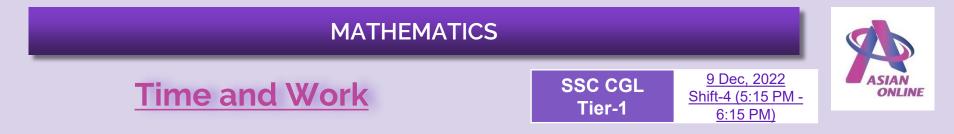
- 29. 20 men can finish a work in 220 days, but at the end of 90 days, 20 additional men are employed. In how many more days will the work be completed?
 - A. 50
 - **B**. 60
 - C. 65
 - **D**. 55



- 30. Abha and anuj working together completed a job in $\frac{40}{9}$ days. If abha had worked twice as efficiently as she actually did and anuj had worked $\frac{1}{3}$ of his actual efficiency, then the work would have been completed in $\frac{60}{17}$ days. Find the time abha world take to complete the work alone.
 - A. 10 days
 - B. 8 days
 - C. 12 days
 - D. 6 days

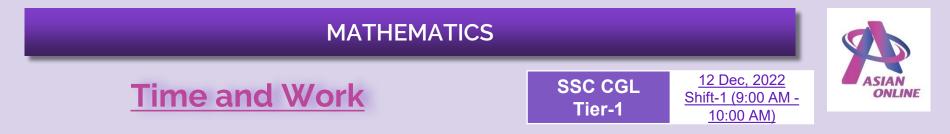


- 31. Two persons P and Q can do a job together in 36 days. P is 3 times as efficient as Q. In how many days can Q alone complete the work?
 - A. 148
 - **B**. 140
 - **C**. 144
 - **D**. 146

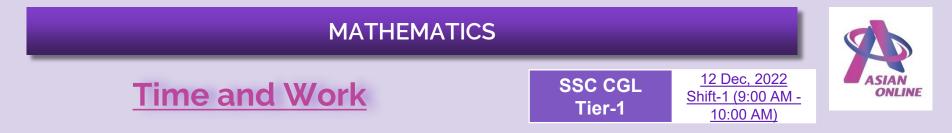


32. A, B and C can separately do a work in 6, 10 and 15 days respectively. They started to work together but C left after 2 days. In how many days will the remaining work be finished? $1^{\frac{2}{-}}$ A. B. 5 8 7 C.

D.

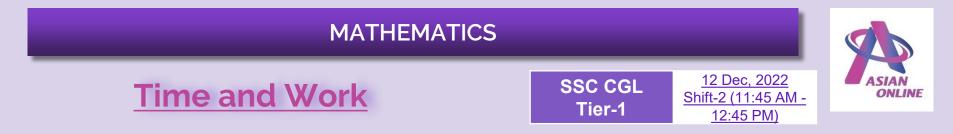


- 33. If Anju is 30% more efficient than Bitt, then how much time will they take, working together, to complete a job which Anju alone could have done in 23 days?
 - A. 13 days
 - B. $20\frac{3}{17}$ days
 - C. 15 days
 - D. 11 days



34. A machine takes 10 h to cut 240 tools. How many tools will it cut in 25 h?

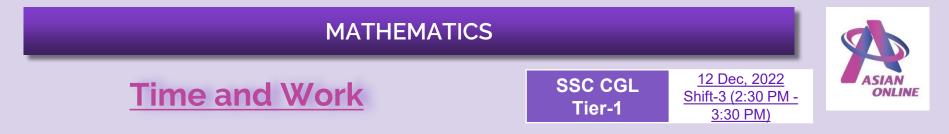
- A. 600
- **B**. 480
- C. 550
- **D**. 360



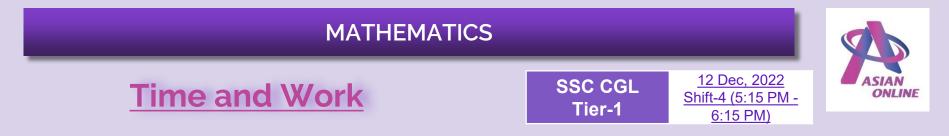
35. Raju, Shobh and Mohan can do a work in 15 days, 20 days and 25 days respectively. In how many days, will the work be finished, if they do it on alternate days?

A.
$$15\frac{9}{10} \text{ days}$$

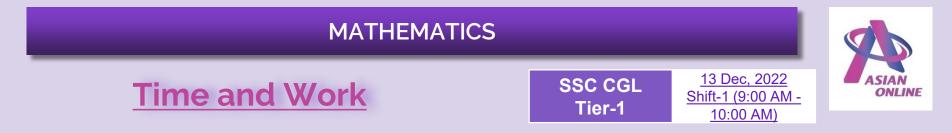
B. $18\frac{7}{10} \text{ days}$
C. $21\frac{7}{10} \text{ days}$
D. $18\frac{9}{10} \text{ days}$



- 36. A is 40% more efficient than B. How much time will both, working together, take to finish the work, which B alone can finish in 36 days?
 - A. 18 days
 - B. $9\frac{1}{3}$ days
 - C. 15 days
 - D. $11\frac{2}{3}$ days

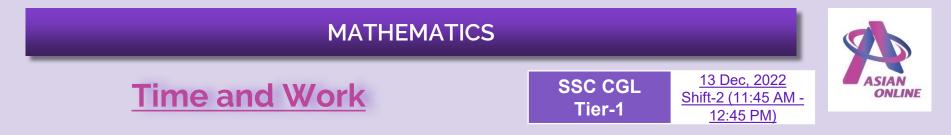


- 37. Aarif, Arun and Abraham can do a work in 12, 20 and 24 days, respectively. They all begin together. Aarif leaves the work 1 day, Arun 3 days and Abraham 4 days before its completion. In how many days is the work finished?
 - A. 8
 - **B**. 10
 - C. 11
 - D. 9

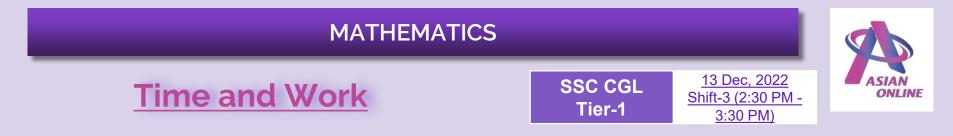


38. A is 20% more efficient than B. How much time will they working together take to complete a job which A alone could have done in 29 days?

 $\begin{array}{ccc} A. & \frac{145}{11} \\ B. & \frac{116}{11} \\ C. & \frac{203}{11} \\ D. & \frac{174}{11} \end{array}$



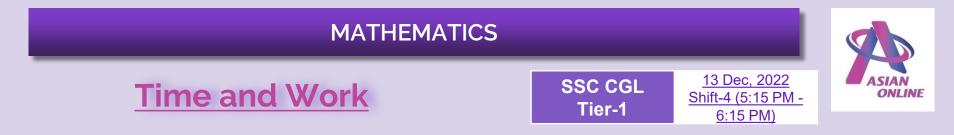
- 39. A, B and C can all together do a piece of work in 10 days, in which B takes 3 times as long as A and C together to do the work. In how many days can B alone do the work?
 - A. 50 days
 - B. 40 days
 - C. 10 days
 - D. 15 days



40. Two persons A and B working separately can sanitise a building in 6 and 10 hours, respectively. They work in stretches of one hour alternately. If A begins at 8 a.m., then when will the work be finished?

A.
$$9\frac{1}{3}h$$

B. $7\frac{1}{3}h$
C. $6\frac{1}{3}h$
D. $8\frac{1}{3}h$



41. Pawan can do a piece of work in 32 days. He worked for 8 days and left the work. Thereafter Sandeep finished the remaining work in 27 days. In how many days can Pawan and Sandeep together do the whole work?

A.
$$16\frac{16}{17}$$
 days
B. $16\frac{13}{17}$ days
C. $16\frac{15}{17}$ days
D. $16\frac{14}{17}$ days

MATHEMATICS



Time and Work

Answer key									
1	А	11	А	21	С	31	С	41	А
2	В	12	В	22	D	32	В		
3	А	13	В	23	С	33	А		
4	С	14	С	24	D	34	А		
5	D	15	D	25	А	35	D		
6	D	16	В	26	А	36	С		
7	D	17	В	27	С	37	А		
8	С	18	А	28	А	38	D		
9	В	19	А	29	С	39	В		
10	А	20	D	30	В	40	В		