

Practice Exercise

Level - I

18. 2 men and 3 boys can do a piece of work in 10 days while 3 men and 2 boys can do the same work in 8 days. In how many days can 2 men and 1 boy do the work ?
- (a) $12\frac{1}{2}$ days (b) $11\frac{1}{2}$ days
 (c) $15\frac{1}{2}$ days (d) $13\frac{1}{2}$ days
19. Three pumps working 8 hours a day can empty a tank in 2 days. How many hours a day must 4 pumps work to empty the tank in 1 day.
- (a) 10 hours (b) 12 hours
 (c) 8 hours (d) None of these
20. If 18 binders bind 900 books in 10 days, how many binders will be required to bind 660 books in 12 days ?
- (a) 14 (b) 13 (c) 22 (d) 11
21. If 27 men take 15 days to mow 225 hectares of grass, how long will 33 men take to mow 165 hectare ?
- (a) 9 days (b) 18 days
 (c) 6 days (d) 12 days
22. X and Y can do a piece of work in 72 days. Y and Z can do it in 120 days. X and Z can do it in 90 days. In how many days all the three together can do the work ?
- (a) 100 days (b) 150 days
 (c) 60 days (d) 80 days
23. If 6 men and 8 boys can do a piece of work in 10 days and 26 men and 48 boys can do the same work in 2 days, the time taken by 15 men and 20 boys to do the same type of work will be
- (a) 6 days (b) 4 days
 (c) 8 days (d) 7 days
24. The work done by man, a woman and a boy are in the ratio 3 : 2 : 1. There are 24 men, 20 women and 16 boys in a factory whose weekly wages amount to ₹ 224. What will be the yearly wages of 27 men, 40 women and 15 boys?
- (a) ₹ 16366 (b) ₹ 16466
 (c) ₹ 16066 (d) ₹ 16016
25. Two pipes can fill a cistern in 6 minutes and 7 minutes respectively. Both the pipes are opened alternatively for 1 minute each. In what time will they fill the cistern.
- (a) 6 minutes (b) $6\frac{2}{3}$ minutes
 (c) $6\frac{3}{7}$ minutes (d) $3\frac{1}{2}$ minutes
26. Three pipes A, B and C can fill a tank from empty to full in 30 minutes, 20 minutes and 10 minutes respectively. When the tank is empty, all the three pipes are opened. A, B and C discharge chemical solutions P, Q and R respectively. What is the proportion of solution R in the liquid in the tank after 3 minutes?
- (a) $\frac{3}{11}$ (b) $\frac{6}{11}$ (c) $\frac{4}{11}$ (d) $\frac{7}{11}$
27. A and B can finish a work in 10 days while B and C can do it in 18 days. A started the work, worked for 5 days, then B worked for 10 days and the remaining work was finished by C in 15 days. In how many days could C alone have finished the whole work ?
- (a) 30 days (b) 15 days
 (c) 45 days (d) 24 days
28. A certain number of men can do a work in 60 days. If there were 8 men more it could be finished in 10 days less. How many men are there ?
- (a) 75 men (b) 40 men
 (c) 48 men (d) 45 men
29. A and B can do a job in 16 days and 12 days respectively. B has started the work alone 4 days before finishing the job, A joins B. How many days has B worked alone?
- (a) 6 days (b) 4 days
 (c) 5 days (d) 7 days
30. Two pipes A and B when working alone can fill a tank in 36 min. and 45 min. respectively. A waste pipe C can empty the tank in 30 min. First A and B are opened. After 7 min., C is also opened. In how much time will the tank be full ?
- (a) $\frac{1}{60}$ (b) $\frac{1}{30}$
 (c) $\frac{7}{20}$ (d) $\frac{13}{20}$
31. A can do a piece of work in 25 days and B in 20 days. They work together for 5 days and then A goes away. In how many days will B finish the remaining work ?
- (a) 17 days (b) 11 days
 (c) 10 days (d) 15 days
32. 12 men complete a work in 18 days. Six days after they had started working, 4 men joined them. How many days will all of them take to complete the remaining work ?
- (a) 10 days (b) 12 days
 (c) 15 days (d) 9 days
33. A can do a piece of work in 10 days, while B alone can do it in 15 days. They work together for 5 days and the rest of the work is done by C in 2 days. If they get ₹ 450 for the whole work, how should they divide the money ?
- (a) ₹ 225, ₹ 150, ₹ 75 (b) ₹ 250, ₹ 100, ₹ 100
 (c) ₹ 200, ₹ 150, ₹ 100 (d) ₹ 175, ₹ 175, ₹ 100
34. A can do some work in 24 days, B can do it in 32 days and C can do it in 60 days. They start working together. A left after 6 days and B left after working for 8 days. How many more days are required to complete the whole work ?
- (a) 30 (b) 25 (c) 22 (d) 20
35. Mayank can do 50% more work than Shishu in the same time. Shishu alone can do a piece of work in 30 hours. Shishu starts working and he had already worked for 12 hours when Mayank joins him. How many hours should Shishu and Mayank work together to complete the remaining work ?
- (a) 6 (b) 12 (c) 4.8 (d) 9.6
36. In a fort there was sufficient food for 200 soldiers for 31 days. After 27 days 120 soldiers left the fort. For how many extra days will the rest of the food last for the remaining soldiers ?
- (a) 12 days (b) 10 days
 (c) 8 days (d) 6 days

37. Sambhu can do $\frac{1}{2}$ of the work in 8 days while kalu 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
38. A and B can do a piece of work in 45 and 40 days respectively. They began the work together, but A leaves after some days and B finished the remaining work in 23 days. After how many days did A leave?
- (a) 7 days (b) 8 days
 (c) 9 days (d) 11 days
39. There is sufficient food for 400 men for 31 days. After 28 days, 280 men leave the place. For how many days will the rest of the food last for the rest of the men?
- (a) 10 days (b) 12 days
 (c) 16 days (d) 20 days
40. A tyre has two punctures. The first puncture alone would have made the tyre flat in 9 minutes and the second alone would have done it in 6 minutes. If air leaks out at a constant rate, how long does it take both the punctures together to make it flat?
- (a) $1\frac{1}{2}$ minutes (b) $3\frac{1}{2}$ minutes
 (c) $3\frac{3}{5}$ minutes (d) $4\frac{1}{4}$ minutes
41. 12 men and 16 boys can do a piece of work in 5 days, 13 men and 24 boys can do it in 4 days. Then the ratio of daily work done by a man to that of a boy is
- (a) 2 : 1 (b) 3 : 1 (c) 3 : 2 (d) 5 : 4
42. Two taps can fill a tank in 12 and 18 minutes respectively. Both are kept open for 2 minutes and the first is turned off. In how many minutes more will the tank be filled?
- (a) 15 min. (b) 20 min.
 (c) 11 min. (d) 13 min.
43. A cistern normally takes 6 hours to be filled by a tap but because of a leak, 2 hours more. In how many hours will the leak empty a full cistern?
- (a) 20 hrs (b) 24 hrs
 (c) 26 hrs (d) None of these
44. 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) 7 days (b) 11 days
 (c) 12 days (d) 16 days
45. If m man can do a work in r days, then the number of days taken by $(m+n)$ men to do it is:
- (a) $\frac{m+n}{mn}$ (b) $\frac{m+n}{mr}$ (c) $\frac{mr}{(m+n)}$ (d) $\frac{(m+n)r}{mn}$
46. Pipes A and B can fill a tank in 5 and 6 hours, respectively. Pipe C can empty it in 12 hours. The tank is half full. All the three pipes are in operation simultaneously. After how much time, the tank will be full? [SBI Clerk-2014]
- (a) $3\frac{9}{17}$ h (b) 11 h (c) $2\frac{8}{11}$ h (d) $1\frac{13}{17}$ h
 (e) None of these
47. If 10 men or 18 boys can do a work in 15 days, then the number of days required by 15 men and 33 boys to do twice the work is [SSC-Sub. Ins.-2012]
- (a) $4\frac{1}{2}$ (b) 8 (c) 9 (d) 36
48. In a fort, there was sufficient food for 200 soldiers for 31 days. After 27 days, 120 soldiers left the fort. For how many extra days will be rest of the food last for the remaining soldiers? [SSC-Sub. Ins.-2012]
- (a) 10 days (b) 6 days
 (c) 4 days (d) 12 days
49. A can do as much work as B and C together can do. A and B can together do a piece of work in 9 hours 36 minutes and C can do it in 48 hours. The time (in hours) that B needs to do the work alone, is: [SSC-Sub. Ins.-2013]
- (a) 18 (b) 24 (c) 30 (d) 12
50. 3 men and 7 women can do a job in 5 days. While 4 men and 6 women can do it in 4 days. The number of days required for a group of 10 women working together, at the same rate as before, to finish the same job is: [SSC-Sub. Ins.-2013]
- (a) 30 (b) 36 (c) 40 (d) 20
51. A can do $\frac{7}{8}$ of work in 28 days, B can do $\frac{5}{6}$ of the same work in 20 days. The number of days they will take to complete if they do it together is [SSC-Sub. Ins.-2014]
- (a) $15\frac{3}{7}$ days (b) $17\frac{3}{5}$ days
 (c) $14\frac{5}{7}$ days (d) $13\frac{5}{7}$ days
52. Seventy-five men are employed to lay down a railway line in 3 months. Due to certain emergency conditions, the work was to be finished in 18 days. How many more men should be employed to complete the work in the desired time? [SSC-Sub. Ins.-2014]
- (a) 300 (b) 325 (c) 350 (d) 375
53. Two pipes A and B can fill a tank in 6 hours and 4 hours respectively. If they are opened on alternate hours and if pipe A is opened first, then the tank shall be full in [SSC-MT-2013]
- (a) $4\frac{1}{2}$ hrs (b) 5 hrs (c) $5\frac{1}{2}$ hrs (d) 6 hrs
54. A, B and C can do a piece of work in 10, 12 and 15 days respectively. A leaves 5 days before the completion of the work and B leaves 2 days after A. The whole work lasts for [SSC-MT-2013]
- (a) 7 days (b) 6 days
 (c) 12 days (d) 13 days

55. A can do a piece of work in 20 days which B can do in 12 days. B worked at it for 9 days. A can finish the remaining work in : [SSC 10+2-2012]
 (a) 5 days (b) 7 days
 (c) 11 days (d) 3 days
56. A man walks 'a' km in 'b' hours. The time taken to walk 200 metres is: [SSC 10+2-2012]
 (a) $\frac{200b}{a}$ hours (b) $\frac{b}{5a}$ hours
 (c) $\frac{b}{a}$ hours (d) $\frac{ab}{200}$ hours
57. A is thrice as good a workman as B and takes 60 days less than B for doing a job. The time in which they can do it together is: [SSC 10+2-2012]
 (a) 15 days (b) 30 days
 (c) $22\frac{1}{2}$ days (d) 60 days
58. A can do a work in 20 days and B can do the same work in 30 days. In how many days can A and B together do the work? [SSC 10+2-2013]
 (a) 15 (b) 16 (c) 10 (d) 12
59. A and B working separately can do a piece of work in 9 and 15 days respectively. If they work for a day alternatively, with A beginning, then the work will be completed in [SSC 10+2-2014]
 (a) 10 days (b) 11 days
 (c) 9 days (d) 12 days
60. Two pipes A and B can fill a tank in 36 min. and 45 min. respectively. Another pipe C can empty the tank in 30 min. First A and B are opened. After 7 minutes, C is also opened. The tank is filled up in [SSC 10+2-2014]
 (a) 39 min. (b) 46 min.
 (c) 40 min. (d) 45 min.
61. 9 women can complete a piece of work in 19 days. How many days will 18 women take to complete the same piece of work? [IBPS Clerk-2012]
 (a) 12 days (b) 6.5 days
 (c) 9 days (d) 8.5 days
 (e) None of these
62. Two pipes can full a tank in 10 h and 16 h respectively. A third pipe can empty the tank in 32 h. If all the three pipes function simultaneously, then in how much time the tank will be full? (in hours) [IBPS Clerk-2013]
 (a) $7\frac{11}{21}$ (b) $7\frac{13}{21}$ (c) $8\frac{4}{21}$ (d) $6\frac{5}{14}$
 (e) $8\frac{9}{14}$
63. 56 workers can finish a piece of work in 14 days. If the work is to be completed in 8 days, then how many extra workers are required? [IBPS Clerk-2013]
 (a) 36 (b) 48
 (c) 44 (d) 42
 (e) 32

Level - II

1. A pipe can fill a tank in 15 minutes and another one in 10 minutes. A third pipe can empty the tank in 5 minutes. The first two pipes are kept open for 4 minutes in the beginning and then the third pipe is also opened. In what time will the tank be emptied ?
 (a) 35 min (b) 15 min
 (c) 20 min (d) Cannot be emptied
2. Filling pipe, if opened alone, takes 5 minutes to fill a cistern. Suddenly, during the course of filling, the waste pipe (which is of similar size and flow as of fill pipe) is opened for 2 minutes, then the cistern will be filled in
 (a) $3\frac{1}{7}$ min (b) $3\frac{1}{3}$ min
 (c) 5 min (d) 7 min
3. Three taps A, B and C can fill a tank in 12, 15 and 20 hours respectively. If A is open all the time and B and C are open for one hour each alternately, then the tank will be full in :
 (a) 6 hrs. (b) $6\frac{2}{3}$ hrs.
 (c) 7 hrs. (d) $7\frac{1}{2}$ hrs.
4. 1 man or 2 women or 3 boys can do a work in 44 days. Then, in how many days will 1 man, 1 woman and 1 boy do the work?
 (a) 12 days (b) 24 days
 (c) 18 days (d) 36 days
5. A, B and C can do a work in 8, 16 and 24 days respectively. They all begin together. A continues to work till it is finished, C leaving off 2 days and B one day before its completion. In what time is the work finished?
 (a) 3 days (b) 4 days
 (c) 5 days (d) 8 days
6. Two pipes A and B can fill a tank in 24 minutes and 32 minutes respectively. If both the pipes are opened simultaneously, after how much time should B be closed so that the tank is full in 18 minutes?
 (a) 6 min. (b) 8 min.
 (c) 12 min. (d) 14 min.
7. A contractor undertook to do a piece of work in 9 days. He employed certain number of labours but 6 of them were absent from the very first day and the rest could finish the work in only 15 days. Find the number of men originally employed .
 (a) 15 (b) 6 (c) 13 (d) 9

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24. Two pipes can fill a cistern in 14 and 16 hours respectively. The pipes are opened simultaneously and it is found that due to leakage in the bottom of the cistern, it takes 32 minutes extra for the cistern to be filled up. When the cistern is full, in what time will the leak empty it?
 (a) 114 h (b) 112 h (c) 100 h (d) 80 h
25. A student studying the weather for d days observed that (i) it rained on 7 days, morning or afternoon; (ii) when it rained in the afternoon, it was clear in the morning; (iii) there were five clear afternoons and (iv) there were six clear morning. Then d equals
 (a) 3 (b) 7 (c) 11 (d) 9
26. If 6 BSF or 10 CRPF companies can demolish a terrorist outfit in Kashmir in 2 days, find how long will 4 BSF and 9 CRPF companies take to do the same?
 (a) 1.27 days (b) 2.27 days
 (c) 3.27 days (d) 4.27 days
27. Three pumps working 8 hours a day can empty a tank in 2 days. How many hours a day must 4 pumps work to empty the tank in 1 day?
 (a) 10 hours (b) 12 hours
 (c) 8 hours (d) None of these
28. A group of men decided to do a job in 4 days. But since 20 men dropped out every day, the job completed at the end of the 7th day. How many men were there at the beginning?
 (a) 240 (b) 140 (c) 280 (d) 150
29. The total number of men, women and children working in a factory is 18. They earn ₹ 4000 in a day. If the sum of the wages of all men, all women and all children is in the ratio of 18 : 10 : 12 and if the wages of an individual man, woman and child is in the ratio 6 : 5 : 3, then how much a woman earn in a day?
 (a) ₹ 400 (b) ₹ 250 (c) ₹ 150 (d) ₹ 120
30. Raju can do a piece of work in 10 days, Vicky in 12 days and Tinku in 15 days. They all start the work together, but Raju leaves after 2 days and Vicky leaves 3 days before the work is completed. In how many days is the work completed?
 (a) 5 days (b) 6 days (c) 7 days (d) 8 days
31. A can do a piece of work in 10 days and B is 25% more efficient than A. In what time will the work be finished if A and B work together? [SBI PO-2011]
 (a) $4\frac{4}{9}$ days (b) $5\frac{5}{7}$ days
 (c) 5 days (d) $6\frac{2}{3}$ days
 (e) None of these
32. A and B together can complete a task in 20 days. B and C together can complete the same task in 30 days. A and C together can complete the same task in 40 days. What is the respective ratio of the number of days taken by A when completing the same task alone to the number of days taken by C when completing the same task alone?
 [IBPS-PO-2012]
- (a) 2 : 5 (b) 2 : 7 (c) 3 : 7 (d) 1 : 5
 (e) 3 : 5
33. 8 men and 4 women together can complete a piece of work in 6 days. The work done by a man in one day is double the work done by a woman in one day. If 8 men and 4 women started working and after 2 days 4 men left and 4 new women joined, in how many more days will the work be completed? [IBPS-PO-2013]
 (a) 5 days (b) 8 days
 (c) 6 days (d) 4 days
 (e) 9 days
34. X and Y can do a piece of work in 30 days. They work together for 6 days and then X quits and Y finishes the work in 32 more days. In how many days can Y do the piece of work alone? [SSC CGL-2012]
 (a) 30 days (b) 32 days
 (c) 34 days (d) 40 days
35. 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, then B alone could do it in [SSC CGL-2013]
 (a) 15 days (b) 20 days
 (c) 25 days (d) 30 days
36. A can do a piece of work in 6 days. B can do the same work in 15 days. How long would both of them take to do the same work? [SSC CGL-2013]
 (a) 2 days (b) 4 days
 (c) 6 days (d) 8 days
37. 12 men construct 1.5 km of road in 7 days. 28 men will construct 12 km of roads in [SSC CGL-2013]
 (a) 20 days (b) 24 days
 (c) 28 days (d) 38 days
38. A, B and C together can do a piece of work in 40 days. After working with B and C for 16 days, A leaves and then B and C complete the remaining work in 40 days more. A alone could do the work in [SSC CGL-2014]
 (a) 80 days (b) 90 days
 (c) 100 days (d) 120 days
39. Three pipes A, B and C can fill a tank in 6 hours. After working it together for 2 hours, C is closed and A and B can fill the remaining part in 7 hours. The number of hours taken by C alone to fill the tank is [SSC CGL-2014]
 (a) 10 (b) 12
 (c) 14 (d) 16
40. Pratibha is thrice as efficient as Sonia and is therefore able to finish a piece of work in 60 days less than Sonia. Pratibha and Sonia can individually complete the work respectively in [SSC CGL-2014]
 (a) 30, 60 days (b) 60, 90 days
 (c) 30, 90 days (d) 40, 120 days
41. 40 men can finish a piece of work in 60 days. After some days, 10 men leave the work so that the work is finished in 70 days. The number of days after which 10 men left the work is [SSC CGL-2014]
 (a) 20 days (b) 25 days
 (c) 30 days (d) 40 days