Mixed Proportion

1. A certain job was assigned to a group of men to do in 60 days. But 18 men did not turn up for the job and the remaining men did the job in 96 days. The original number of men in the group was?
(A) 52 **(B)** 60
(C) 36 **(D)** 42
(E) 48

2. A certain number of men can complete a piece of work in 80 days. Had there been 15 men less, it would have taken 16 days more. How many men were there initially?
(A) 96 men **(B)** 75 men
(C) 80 men **(D)** 90 men
(E) None of the Above

3. If 9 men or 16 boys can do a piece of work in 20 days, then 10 men and 8 boys together will take how many days to finish the same work?
(A) 11 12/29 days **(B)** 14 12/29 days
(C) 12 12/29 days **(D)** 8 12/29 days
(E) None of these

4. A group of 30 men, working 4 hours a day can do a piece of work in 10 days. Find the number of days in which another group of 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 hours as 4 men of the second group do in 1 hr.
(A) $6\frac{1}{3}$ days **(B)** $6\frac{2}{3}$ days
(C) $5\frac{5}{6}$ days **(D)** $3\frac{1}{6}$ days
(E) None of these

5. 40 men together complete a work in 12 days while 12 women together complete that work in 48 days. All men started working together and on every next day 10 men left the work and after four days, 16 women joined to do the remaining work then find the time taken by 16 women to do the remaining work?
(A) days **(B)** 22 ½ days
(C) 30 days **(D)** 28 ½ days
(E) 32 ½ days

6. 12 men can do a work in 10 days while 15 women can do that work in 12 days and 20 children can do that work in 15 days. All men started work together and after five days they left the work then the remaining work is completed by nine women and X children in five days. Find value of X?
(A) 25 **(B)** 20
(C) 15 **(D)** 12
(E) 10

7. If 10 men and 15 women complete a piece of work in 8 days, while 12 men and 8 women can complete the same piece of work in 10 days. If a boy is 50% less efficient than the man then find the time taken by 2 men, 4 women and 18 boys to complete the work.
(A) 20/3 days **(B)** 40/3 days
(C) 27 days **(D)** 50/3 days
(E) None of these

8. 20 men can complete a work in 12 days. 5 women are as efficient as 3 men. 4 men and 10 women started working and they already worked for 8 days.
Quantity I: Additional number of women required to complete the remaining work in 10 days.

Quantity II: Additional number of men required to complete the remaining work in either 8 or less than 8 days.
(A) Quantity I > Quantity II
(B) Quantity I < Quantity II
(C) Quantity I ≥ Quantity II
(D) Quantity I ≤ Quantity II
(E) Quantity I = Quantity II or No relation

9. 56 soldiers can complete a piece of work in 24 days. In how many days can 42 soldiers complete the same piece of work?
(A) 32 days **(B)** 24 days
(C) 16 days **(D)** 48 days
(E) None of these

10. 8 men and 10 women can do a work in 15 days while 10 men and 18 women can do that work in 10 days. 4 men and 5 women started the work and after 10 days all men left the work then find how many more women would be required to complete the whole work in 21 days?
(A) 12 **(B)** 15
(C) 16 **(D)** 10
(E) 18

11. The ratio of work done by 30 women to the work done by 25 men, in the same time is 5:6. If 9 women and 10 men can finish a work in $3\frac{1}{13}$ days. Then how many women can finish the work in 4.5 days?
(A) 18 **(B)** 16
(C) 20 **(D)** 25
(E) none of these

12. A certain number of men can complete a work in six hours less than the time taken by some women.
Work completed by one man in one hour is same as the work completed by one woman in one hour.
→ Which one of the following ratio of number of men to number of women can satisfy the above given condition
(i). 5:6 (ii). 10:3
(iii). 8:5 (iv). 10:7
(A) only (ii)
(B) only (ii) and (iii)
(C) only (i) and (iii)
(D) all of the above
(E) only (ii), (iii)and (iv)

13. A certain number of men can complete a task in two days earlier than some certain number of boys. Task completed by one man in one hour is same as the work completed by three boys in one hour.
Which one of the following ratios of number of men to number of boys can satisfy the above given condition?
(i) 1: 2 (ii) 2: 5
(iii) 2: 3 (iv) 16: 35
(A) only (ii)
(B) only (ii) and (iii)
(C) only (i) and (iii)
(D) All of the above
(E) only (ii), (iii) and (iv)

14. 8 men and 4 women together can complete a piece of work in 6 days. Work done by a man in one day is double the work done by a woman in one day. 8 men and 4 women started working and after 2 days, 4 men left and 4 new women joined the work.
Quantity I: More days required to complete the work
Quantity II: 5 days
(A) Quantity I = Quantity II or No relation
(B) Quantity I ≥ Quantity II
(C) Quantity I < Quantity II
(D) Quantity I ≤ Quantity II
(E) Quantity I > Quantity II

15. 12 men and 16 boys can build a house in 40 days by working 8 hours per day. one man can complete the work in same time as that taken by two boys. 21 men started building another house which is twice as large as the previous house, working 9 hours a day. How

many boys will be needed to build the given house if work has to be completed in approx. 50 days?

(A) 8 **(B)** 10
(C) 12 **(D)** 15
(E) 18

16. If twenty persons can complete 4/5th of the work in twelve days, then find how many more persons will be required to complete the remaining work in one and half days.

(A) 30 **(B)** 10
(C) 20 **(D)** 15
(E) None of these

17. A builder undertakes a contract of a building, which is to be completed in 1 month(April). He employed 10 workers of equal efficiency but at the end of 2/3rd of month, 58(1/3) % of work was remaining, so he employed some more workers to finish the work on time. Wage of 1 worker is Rs.625/day, then find how much total wage is given to the extra workers which are employed to finish the work in time.

(A) Rs.110000 **(B)** Rs.112500
(C) Rs.50000 **(D)** Rs.125000
(E) Rs.68750

18. A group of 12 persons containing men and women can do a piece of work in 13 days, other group of 10 persons containing men and women can do the same piece of work in 16 days. Number of men in first group is 1 more than the number of men in second group. If there is another group of 2 men and 6 women which can do the same piece of work in 26 days. What is the ratio of efficiency of 1 man to that of 1 woman?

(A) 4: 1 **(B)** 5: 2
(C) 5: 3 **(D)** 4: 3
(E) 5: 1

19. 3 men and 4 women are employed to clear a forest cover of certain no. of trees. A woman alone is 25% less efficient than a man. They all started working and after 5 days of work 2 men and 1 woman more is employed such that after working for 12 more days, 1/10th of remaining forest is left to be cleared consisting of 50 trees. Find the number of trees cut down by 3 men and 2 women in a day.

(A) 15 **(B)** 12
(C) 30 **(D)** 16
(E) 32

20. In a military camp, the ration was stored for 900 militants at the rate of 750 grams per militant for 104 days. After 13 days some militants came from another camp. As a result the remaining ration got finished only in 35 days at the rate of 1170 grams per militant. Find the number of militants who joined later.

(A) 750 **(B)** 700
(C) 650 **(D)** 550
(E) 600