21- 4 men and 6 women can complete a work in 8 days, while 3 men and 7 women can complete it in 10 days. In how many days will 10 women complete it?

- A.35 days
- **B.**40 days
- **C.**45 days
- **D.**50 days
- E.None of these

Answer & Explanation
Answer - B (40 days)
Explanation - Let 1 man's 1 day's work = x and 1 woman's 1 day's work = y .
Then, $4x + 6y = -$ and $3x + 7y = -$.
8 10
Solving the two equations, we get: $x = \frac{11}{2}$, $y = \frac{1}{2}$
Solving the two equations, we get: $x = -400$, $y = -400$
400 400
1
1 woman's 1 day's work = $_$.
400
1 1
10 women's 1 day's work = $x_{10} = $.
$\frac{10}{400}$ $\frac{10}{40}$
Hence 10 women will complete the work in 40 days

Hence, 10 women will complete the work in 40 days.

22- A and B can together finish a work 30 days. They worked together for 20 days and then B left. After another 20 days, A finished the remaining work. In how many days A alone can finish the work?

- **A.**40 days
- **B.**50 days
- **C.**54 days
- **D.**60 days
- E.None of these

Techofworld.In

Answer & Explanation

Answer - **D** (60 days) Explanation -

(A + B)'s 20 day's work = $\frac{1}{30} \times 20 = \frac{2}{3}$.

Remaining work = $1 - \frac{2}{3} = \frac{1}{3}$.

1 Now,_work is done by A in 20 days. 3

Therefore, the whole work will be done by A in $(20 \times 3) = 60$ days.

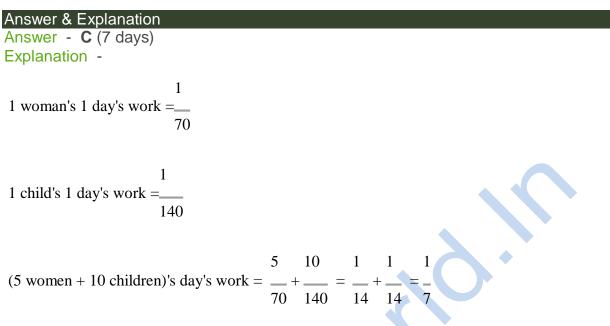
23- P can complete a work in 12 days working 8 hours a day. Q can complete the same work in 8 days working 10 hours a day. If both P and Q work together, working 8 hours a day, in how many days can they complete the work?

- A.5 5/11 days
- **B.**5 6/11 days
- C.6 5/11 days
- D.6 6/11 days
- E.None of these

Answer & Explanation

Answer - A (5 5/11) Explanation - P can complete the work in (12×8) hrs. = 96 hrs. Q can complete the work in (8×10) hrs. = 80 hrs. 1 1 P's1 hour's work = ____and Q's 1 hour's work =__ 96 80 1 1 11 (P + Q)'s 1 hour's work = ____ + 480 96 80 480 So, both P and Q will finish the work in ____ hrs. 11 480 1 60 5 Number of days of 8 hours each = ____ x = a days = 5 days.11 8 11 11 24-10 women can complete a work in 7 days and 10 children take 14 days to complete the work. How many days will 5 women and 10 children take to complete the work?

- A.3 days
- **B.**5 days
- **C.**7 days
- D.Cannot be determined
- E.None of these



5 women and 10 children will complete the work in 7 days.

25- 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.**12 days
- **B.**13 days
- **C.**14 days
- **D.**15 days
- E.None of these

Answer & Explanation

Answer - **A** (12 days) Explanation -

Let total money be Rs. *x*.

A's 1 day's wages = Rs.
$$\frac{x}{21}$$
, B's 1 day's wages = Rs. $\frac{x}{28}$

(A + B)'s 1 day's wages = Rs. $\frac{x}{21} + \frac{x}{28} = Rs. \frac{x}{12}$

Money is sufficient to pay the wages of both for 12 days.

 $\langle \langle \rangle$

26- A, B and C can complete a work separately in 24, 36 and 48 days respectively. They started together but C left after 4 days of start and A left 3 days before the completion of the work. In how many days will the work be completed?

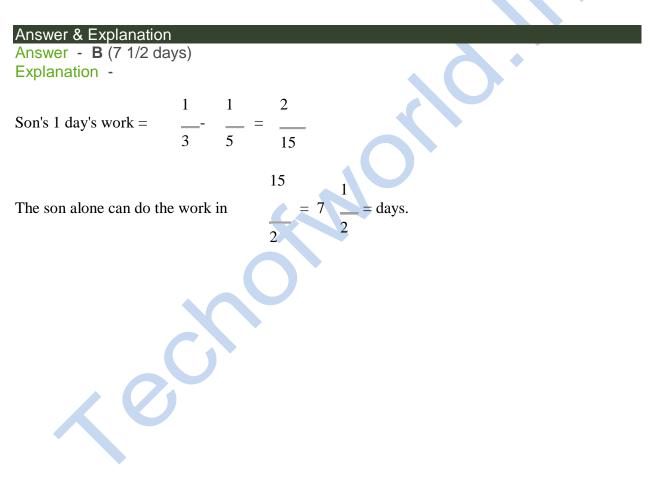
- **A.**15 days
- **B.**22 days
- **C.**25 days
- **D.**35 days
- E.None of these

Answer & Explanation Answer - A (15 days) Explanation -
$(A + B + c)$'s 1 day's work = $\frac{1}{24} + \frac{1}{36} + \frac{1}{48} = \frac{13}{144}$
Work done by (A + B +C) in 4 days = $\frac{13}{144}$ x 4 = $\frac{13}{36}$
Work done by B in 3 days = $\frac{1}{36}$ x 3 = $\frac{1}{12}$. Remaining work = 1 - $\frac{13}{36}$ + $\frac{1}{12}$ = $\frac{5}{9}$
(A + B)'s 1 day's work = $\frac{1}{24} + \frac{1}{36} = \frac{5}{72}$
Now, $\frac{5}{72}$ work was done by A and B in $\frac{72}{5} \frac{5}{9} = 8$ days.

Hence, total time taken = (4 + 3 + 8) days = 15 days.

27- A man can do a piece of work in 5 days, but with the help of his son, he can do it in 3 days. In what time can the son do it alone?

- **A.**7 days
- **B.**7 1/2 days
- **C.**8 days
- **D.**8 1/2 days
- E.None of these



28- A does half as much work as B in three-fourth of the time. If together they take 18 days to complete the work, how much time shall B take to do it?

- A.30 days
- **B.**35 days
- **C.**40 days
- **D.**45 days
- E.None of these

Answer & Explanation

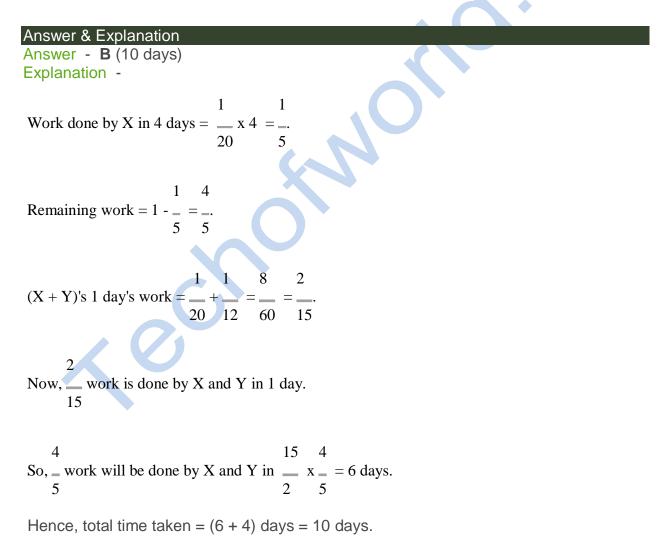
Answer - **A** (30 days) Explanation -

Suppose B takes *x* days to do the work.

3*x* 3 = <u>days to do it.</u> <u>2</u> A takes 2 x . x 4 1 (A + B)'s 1 day's work = 18 1 2 1 _____ or x = 30. = 3*x* 18 х

29- X and Y can do a piece of work in 20 days and 12 days respectively. X started the work alone and then after 4 days Y joined him till the completion of the work. How long did the work last?

- **A.**6 days
- **B.**10 days
- **C.**15 days
- **D.**20 days
- E.None of these



30- A is 30% more efficient than B. How much time will they, working together, take to complete a job which A alone could have done in 23 days?

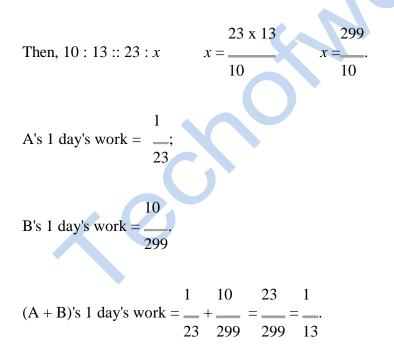
- **A.**11 days
- B.13 days •
- C.15 days •
- D.20 days •
- E.None of these •

Answer & Explanation Answer - B (13 days)

Explanation -

Ratio of times taken by A and B = 100 : 130 = 10 : 13.

Suppose B takes *x* days to do the work.



Therefore, A and B together can complete the work in 13 days.

< economic in