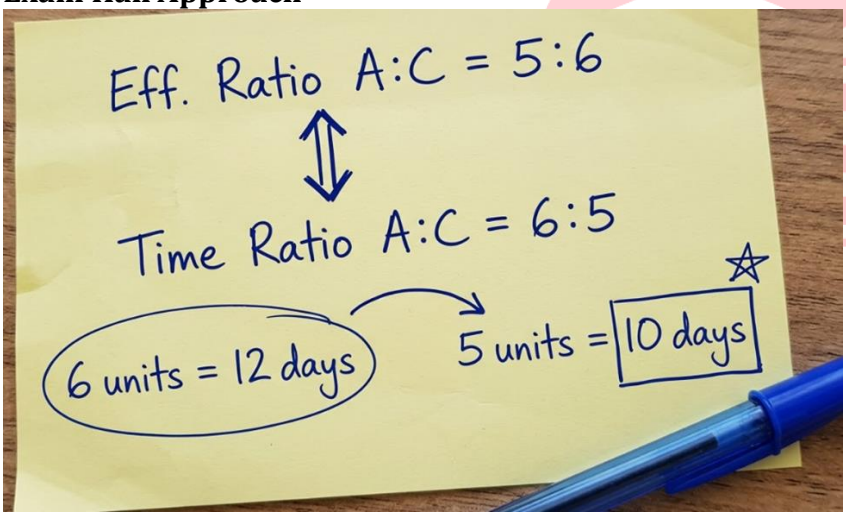
Time & Work Practice Questions For LIC HFL Exam 2026

Q1. Pipe A and pipe B can fill a tank in 15 hours and 18 hours respectively. Both the pipes opened together, after five hours pipe A closed. Find the total time taken to fill the tank.
(a) 12 hours
(b) 15 ours
(c) 9 hours
(d) 14 hours
(e) 16 hours
Ans.(a)
Sol.
Let total capacity of the tank be 90 litre. (LCM)
So, efficiency of A and B is 6 litre/hr and 5 litre/hr respectively.
ATQ
Let required time be T.
$5 \times T + 6 \times 5 = 90$
$T = \frac{60}{5} = 12$

Q2. Pipe P & pipe Q can fill the same tank in 10 hours and 8 hours respectively. If the ratio of efficiency of pipe P & Q together to that of pipe R alone is 6:5, then find time taken by pipe R alone to fill the same tank?
(a) 4.5 hours
(b) 5 hours
(c) 8/3 hours
(d) 16/3 hours
(e) 8 hours
Ans.(d)
Sol.
Total capacity of tank be 40 liters. (LCM of 10 & 8)
So, efficiency of pipe – P = $\frac{40}{10}$ = 4 liters/hour
And, efficiency of pipe – Q = $\frac{40}{8}$ = 5 liters/hour
So, efficiency of pipe – R = $(4 + 5) \times \frac{5}{6}$ = 7.5 liters/hour
Required time = $\frac{40}{7.5} = \frac{16}{3}$ hours

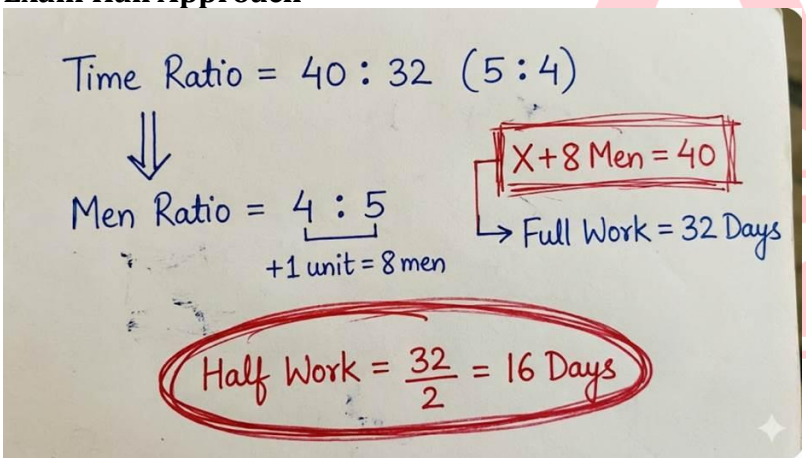
Q3. A alone can do a piece of work in 12 days, while B can do the same work in 16 days. If C is 20% more efficient than A, then find the time taken by C alone to complete the whole work.
(a) 10 days
(b) 14 days
(c) 6 days
(d) 17 days
(e) 4 days
Ans.(a)

Sol.
Information Given in the Question:
A alone can complete the work in 12 days.
B alone can complete the work in 16 days.
C is 20% more efficient than A.
We need to find the time taken by C alone to complete the whole work.
Concept/Formula Used in the Question:
Efficiency is inversely proportional to time.
If a person is x% more efficient, then new efficiency = old efficiency × (1 + x/100)
Time = Total Work / Efficiency
LCM Method:
Take total work as the LCM of 12 and 16.
Detailed Explanation:
Using LCM method:
LCM of 12 and 16 = 48
So, total work = 48 units
A's 1-day work = 48 / 12 = 4 units
C is 20% more efficient than A
So, C's 1-day work = 4 + 20% of 4
= 4 + 0.8
= 4.8 units per day
Now, time taken by C to complete 48 units of work:
Time = 48 / 4.8
= 10 days
Therefore, C alone can complete the work in 10 days.
Exam Hall Approach



Q4. X number of men complete a work in 40 days. If 8 more men join, the work is completed in 32 days. Find the number of days in which X+8 men can complete half of the work.
(a) 20
(b) 24
(c) 16
(d) 40
(e) 48

Ans.(c)
Sol.
Information Given:
X men complete work in 40 days
(X + 8) men complete same work in 32 days
Need time for (X + 8) men to complete **half of the work**
Concept/Formula Used:
Work = Men × Days
Total work is constant
Time = Work / Rate
Explanation:
Let total work = 1 unit
From given:
X × 40 = (X + 8) × 32
40X = 32X + 256
8X = 256
X = 32
So,
X + 8 = 40 men
Total work (in man-days) = 32 × 40 = 1280
Half work = 1280 / 2 = 640
Time taken by 40 men = 640 / 40 = 16 days
Exam Hall Approach



Q5. A contractor employed 20 men to finish a work in 22 days. After 10 days he employed X men more, due to which work completed by them in 6 days less than projected. Find the value of X.
(a) 20
(b) 15
(c) 14
(d) 18
(e) 24
Ans.(a)
Sol.
Information Given in the Question:
20 men can complete the work in 22 days.
After 10 days, X more men were added.

The work got completed 6 days early, i.e., in **16 days** instead of 22.

Concept/Formula Used in the Question:

Total Work = Men × Days

Work done in 10 days = 20 men × 10 days

Remaining work = Total Work - Work done in first 10 days

Remaining work is completed in 6 days by (20 + X) men

Detailed Explanation:

Total Work = 20 × 22 = 440 man-days

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Work done in first 10 days

Work done = 20 × 10 = 200 man-days

Step 3: Remaining Work

Remaining Work = 440 – 200 = 240 man-days

Remaining work done by (20 + X) men in 6 days

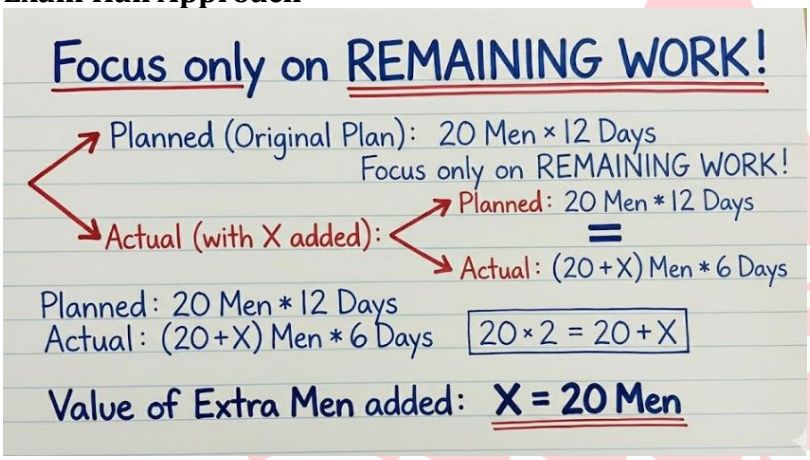
(20 + X) × 6 = 240

120 + 6X = 240

=>6X = 120

=> X = 20

Exam Hall Approach



Q6. The time taken by A and B together to complete a work is 6 days, while B and C together can complete the same work in 8 days. If C and A together take 4 days to complete the work, then find the time taken by A, B, and C together to complete 5/6 of the work.

(a) 20/13 days

(b) 40/13 days

(c) 40 days

(d) 51/13 days

(e) 6/11 days

Ans.(b)

Sol.

Information Given:

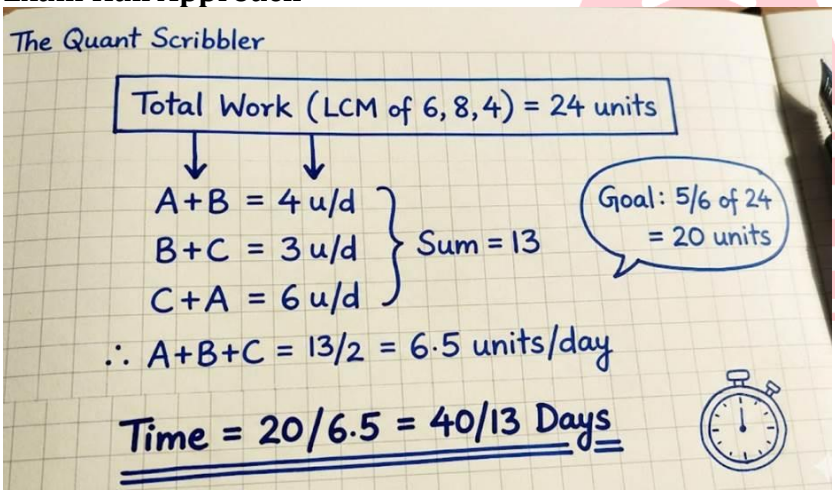
A + B = 6 days

B + C = 8 days

C + A = 4 days

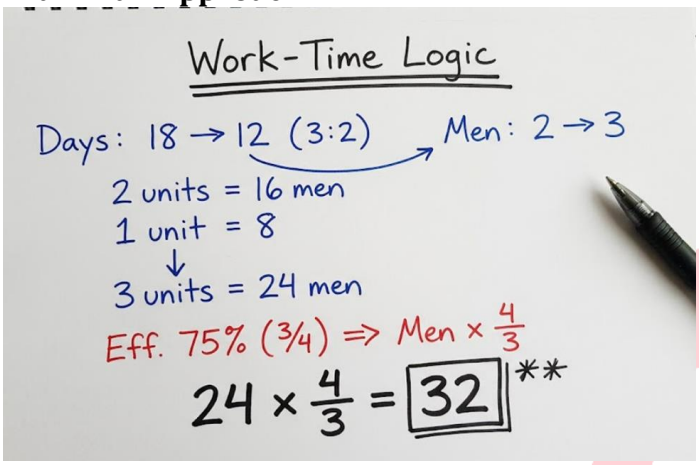
Find time for A + B + C to complete 5/6 work

Concept/Formula Used:
LCM Method (Assume total work = LCM of given times)
Work Rate = Work / Time
Explanation:
LCM of 6, 8, 4 = 24 units (Total Work)
Now,
(A + B)'s 1 day work = 24 / 6 = 4 units
(B + C)'s 1 day work = 24 / 8 = 3 units
(C + A)'s 1 day work = 24 / 4 = 6 units
Add all:
(A+B) + (B+C) + (C+A) = 4 + 3 + 6 = 13 units
But this includes each person twice, so:
2(A + B + C) = 13
=> A + B + C = 13/2 units/day
Total work = 24 units
Time for full work = 24 ÷ (13/2)
= 24 × (2/13)
= 48/13 days
Now for 5/6 work:
Work = (5/6) × 24 = 20 units
Time = 20 ÷ (13/2)
= 20 × (2/13)
= 40/13 days
Exam Hall Approach



Q7. 16 men can complete an assignment in 18 days. For getting the same work completed in 12 days, how many men will be employed with 75% of original efficiency?
(a) 24
(b) 40
(c) 36
(d) 32
(e) 30
Ans.(d)
Sol. Information Given:
16 men can complete the work in 18 days

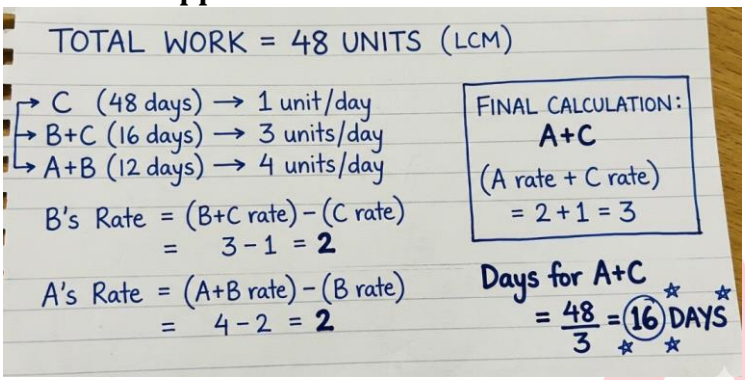
Asked: Number of men (with 75% efficiency) to complete work in 12 days
Concept/Formula Used:
Work = Men × Days × Efficiency
For same work: $(Men_1 \times Days_1 \times Efficiency_1) = (Men_2 \times Days_2 \times Efficiency_2)$
Explanation:
Let required men = x
Original: 16 × 18 × 1 = x × 12 × 0.75
16 × 18 = x × 12 × 0.75
288 = x × 9
x = 288 / 9 = 32
Exam Hall Approach



Q8. A and B together can complete a work in 12 days. B and C together can complete it in 16 days. If C alone can complete it in 48 days, in how many days can A and C complete the work together?
(a) 32
(b) 20
(c) 28
(d) 24
(e) 16
Ans.(e)
Sol.
Information Given in the Question:
A + B = 12 days
B + C = 16 days
C alone = 48 days
Concept/Formula Used in the Question:
LCM method (Assume total work = LCM of given days)
Efficiency = Work / Time
Detailed Explanation:
Take LCM of 12, 16, 48 = **48 units (Total Work)**
Now,
(A + B)'s efficiency = 48 / 12 = 4 units/day
(B + C)'s efficiency = 48 / 16 = 3 units/day
C's efficiency = 48 / 48 = 1 unit/day
Now find B:
(B + C) = 3

C = 1
So, B = 3 - 1 = 2
Now find A:
(A + B) = 4
B = 2
So, A = 4 - 2 = 2
Now find (A + C):
A = 2
C = 1
So, A + C = 3 units/day
= 48 / 3 = 16 days

Exam Hall Approach



Q9. A can complete a work in 20 days and B in 30 days. If A works alone for 5 days and then B joins him, in how many more days will the work be completed?

(a) 9
(b) 12
(c) 15
(d) 8
(e) 6

Ans.(a)

Sol. Information Given in the Question:

A can complete the work in = 20 days
B can complete the work in = 30 days
A works alone for = 5 days
After that B joins A

Concept/Formula Used in the Question:

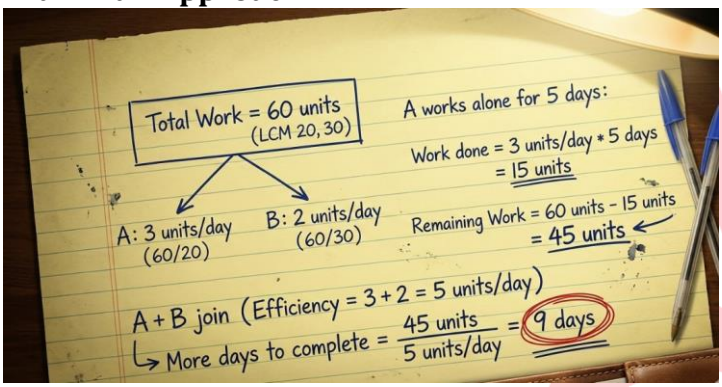
LCM Method (Total Work Method)
Total Work = LCM of 20 and 30
Work done per day = Total Work / Number of days

Detailed Explanation:

Assume total work = LCM of 20 and 30
LCM (20, 30) = 60 units
Work done per day
A's one day work = 60 / 20 = 3 units
B's one day work = 60 / 30 = 2 units

Work done by A in first 5 days
Work done by A = 3 × 5
= 15 units
Remaining work
Remaining work = Total work - Work done
Remaining work = 60 - 15
Remaining work = 45 units
Work done by A and B together per day
A + B work per day = 3 + 2
= 5 units per day
Days required to complete remaining work
Days = Remaining work / Work per day
Days = 45 / 5
Days = 9 days

Exam Hall Approach:



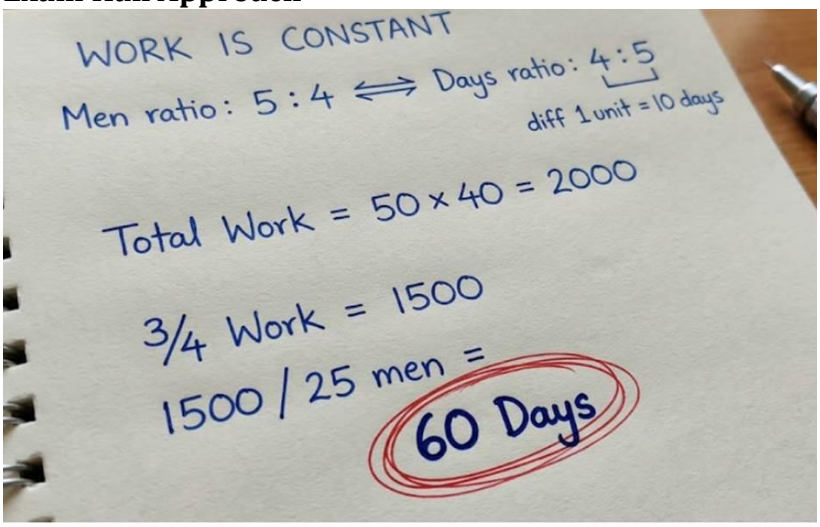
Q10.
20 men can complete a work in 75 days, and 30 women can complete the work in 60 days. If 48 women started a work and after 25 days they were replaced by 40 men, then find the total time taken to complete the whole work (in days).
(a) 37.5
(b) 25
(c) 12.5
(d) 38
(e) 20
Ans.(a)
Sol. Given
20 men can complete the work in 75 days.
30 women can complete the work in 60 days.
48 women worked for 25 days.
Then they were replaced by 40 men.
Find the total time taken to complete the whole work.
Concept Used
Work=Efficiency×Time
Explanation:
Total work is constant.Let the efficiency of a man and a woman be m and w units/day respectively.

ATQ,
20×m×75=30×w×60
$\frac{m}{w}=\frac{6}{5}=\frac{6a}{5a}$
Total work = 20×6a×75=9000a units
Let the 40 men complete the work in t days
ATQ,
48×5a×25+40×6a×t=9000a
240t=3000
12.5=t
Required days = 12.5+25=37.5 days

Q11. 50 men can complete a piece of work in a certain number of days. 40 men can complete the same work in 10 more days. Find the number of days in which 25 men can complete 3/4 of the total work.
(a) 60 days
(b) 30 days
(c) 45 days
(d) 90 days
(e) 75 days
Ans.(a)
Sol.
Information Given:
50 men can complete the work in certain number of days.
40 men can complete the same work in 10 more days.
We need to find the number of days in which 25 men can complete 3/4 of the work.
Concept/Formula Used:
Work = Men × Days
For same work:
$M_1 \times D_1 = M_2 \times D_2$
Explanation:
Let the number of days taken by 50 men be x days.
Then,
Number of days taken by 40 men = x + 10 days
Since total work is same,
50x = 40(x + 10)
50x = 40x + 400
10x = 400
x = 40
So,
Total work = 50 × 40
= 2000 man-days
Now,
3/4 of total work
= (3/4) × 2000
= 1500 man-days

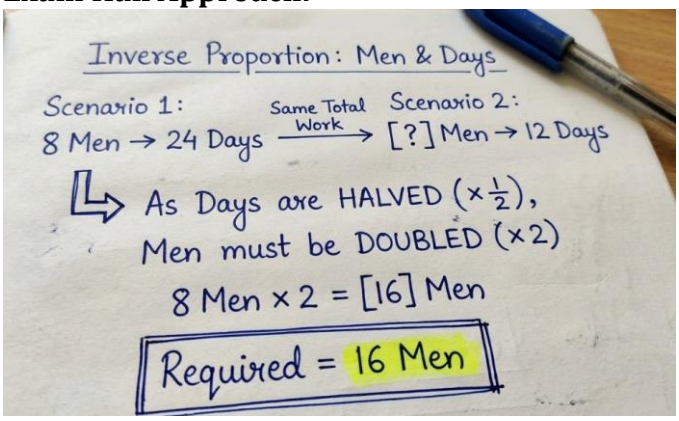
Required number of days for 25 men:
= 1500 / 25
= 60 days
Final Answer: 60 days

Exam Hall Approach



Q12. 8 men can complete a work in 24 days. How many men are required to complete the same work in 12 days?
(a) 12
(b) 16
(c) 20
(d) 24
(e) 28
Ans.(b)
Sol. Information Given in the Question:
Number of men = 8
Time taken = 24 days
Required time = 12 days
Work is the same in both cases
Concept/Formula Used in the Question:
Men × Days = Constant Work
So, M1 × D1 = M2 × D2
Where M1 = initial men D1 = initial days M2 = required men D2 = required days
Detailed Explanation:
According to the formula:
M1 × D1 = M2 × D2
Substitute the values:
8 × 24 = M × 12
192 = 12M
M = 192 / 12
M = 16
So, 16 men are required to complete the work in 12 days.

Exam Hall Approach:



Q13. 8 men and 7 women can complete a piece of work in 15 days. If additional 2 man joined them, then they could finish the 4/5th of work in 10 days, find the time taken by 21 women to complete the work.

(a) 24 days
(b) 18 days
(c) 32 days
(d) 21 days
(e) 25 days

Ans.(e)

Sol.

Let the efficiency of a man and a woman be M & W respectively.

ATQ,

$$\frac{(8M+7W)\times 15}{1}=\frac{(10M+7W)\times 10}{\frac{4}{5}}$$

$$48M+42W=50M+35W$$

$$\frac{M}{W}=\frac{7}{2}$$

Total work = $(8\times 7+\times 7\times 2)\times 15=1050\ units$

Req. days = $\frac{1050}{21\times 2}=25\ days$

Q14. Two inlet pipes can fill a tank alone in 15 min and 20 min respectively. If these two pipes are opened along with an outlet pipe, then the tank is filled in 12 min. Find the time in which an outlet pipe alone can empty the full tank.

(a) 24 min
(b) 30 min
(c) 25 min
(d) 20 min
(e) 36 min

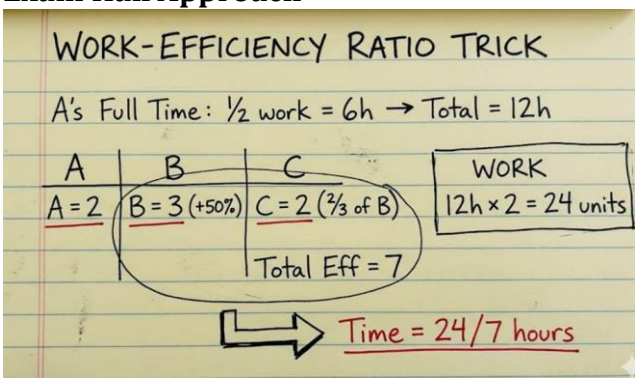
Ans.(b)

Sol. Pipe A fills in 15 min
Pipe B fills in 20 min
Net filling time=12 min

Concept Used
Work and Time
Formula Used
Net Efficiency=Inlet Efficiency-Outlet Efficiency
Solution
1/15+1/20
=(4+3)/60
=7/60
7/60-x=1/12
x=7/60-5/60
=2/60
=1/30
Outlet pipe empties tank in 30 min

Q15. A can complete 1/2 of a work in 6 hours. B is 50% more efficient than A, and C is 2/3 as efficient as B. Find the time taken by all three together to complete the whole work (in hours).
(a) 3/7
(b) 14/9
(c) 24/7
(d) 6/7
(e) 2/5
Ans.(c)
Sol.
Given
A completes 1/2 work in 6 hours
B is 50% more efficient than A
C is 2/3 as efficient as B
Concept Used
LCM Method (Work & Efficiency)
Formula Used
Efficiency = Work done per unit time
Total time = Total work / Total efficiency
Solution
A completes 1/2 work in 6 hours => full work in 12 hours
So, A's 1 hour work = 1/12
Using LCM method, take total work = 24 units
A's efficiency = 24 / 12 = 2 units/hour
B is 50% more efficient than A:
B's efficiency = 2 × 1.5 = 3 units/hour
C is 2/3 as efficient as B:
C's efficiency = 2/3 × 3 = 2 units/hour
Total efficiency = 2 + 3 + 2 = 7 units/hour
Total time = 24 / 7 hours

Exam Hall Approach



Q16. P is twice as efficient as Q and he alone can complete a piece of work in 16 days. Find time taken by both to complete the whole work with 50% of their respective efficiencies (in days)?

(a) $18\frac{1}{3}$

(b) $21\frac{1}{3}$

(c) $20\frac{4}{5}$

(d) $25\frac{2}{3}$

(e) $24\frac{1}{3}$

Ans.(b)

Sol.

Let Q's efficiency be 'x' units/day

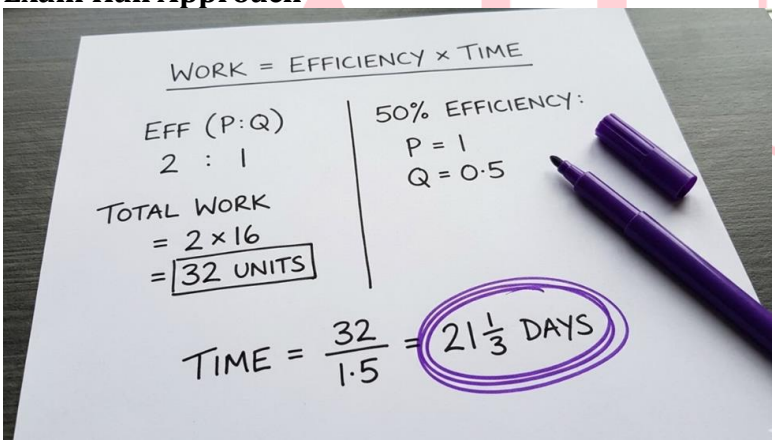
So, P's efficiency be '2x' units/day

ATQ,

Total work $= 16 \times 2x = 32x$ *units*

$Req.days = \frac{32x}{1x+0.5x} = 21\frac{1}{3}$ *days*

Exam Hall Approach



Q17. C and D together can complete a piece of work in 15 days. C alone can complete the same work in 25 days. Find the time taken (in days) by D alone to complete 20% of the work.

(a) 7.5

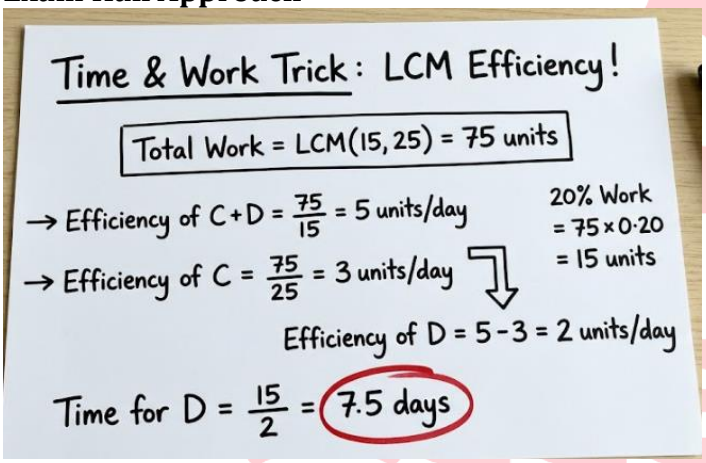
(b) 18.5

(c) 6.5

(d) 24.5

(e) 12.5

Ans.(a)
Sol.
Information Given:
C and D together complete the work in 15 days
C alone completes the work in 25 days
Required: Time taken by D alone to complete 20% of the work
Concept/Formula Used:
LCM Method
Efficiency = Total work / Number of days
Explanation:
Take total work as LCM of 15 and 25
LCM = 75 units
Work done by C and D together in 1 day =75 / 15 = 5 units
Work done by C alone in 1 day =75 / 25 = 3 units
Therefore, work done by D alone in 1 day =5 - 3 = 2 units
Now, 20% of total work =20% of 75 = 15 units
Time taken by D to complete 15 units =15 / 2 = 7.5 days
Final Answer: 7.5 days
Exam Hall Approach



Q18. A is 50% more efficient than B. B and C together can complete a piece of work in 30 days, while A alone can complete it in 20 days. In how many days can A, B, and C together complete the work?
(a) 10 days
(b) 15 days
(c) 12 days
(d) 13 days
(e) 9 days
Ans.(c)
Sol.
Information Given in the Question:
A is 50% more efficient than B
A alone completes work in 20 days
B + C completes work in 30 days

Concept/Formula Used in the Question:

Efficiency ∝ 1 / Time

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Detailed Explanation:

Take total work = LCM of 20 and 30 = 60 units

Now,

A's 1 day work = 60 / 20 = 3 units

A is 50% more efficient than B →

A : B = 3 : 2

So,

B's 1 day work = 2 units

Now,

B + C complete work in 30 days →

(B + C) 1 day work = 60 / 30 = 2 units

So,

C's work = (B + C) - B = 2 - 2 = 0

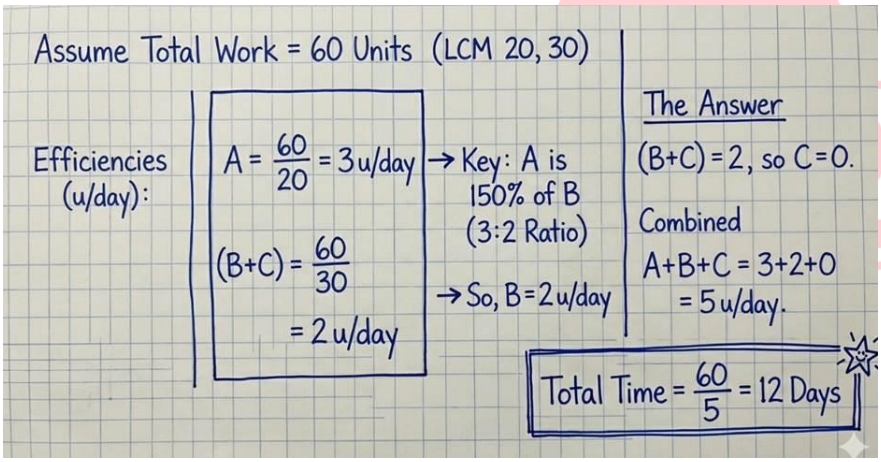
Now total work rate of A + B + C:

= 3 + 2 + 0 = 5 units/day

Time taken = Total work / total efficiency

= 60 / 5 = 12 days

Exam Hall Approach



Q19. A tank is normally filled in 15 hours but due to a leak in the tank, it takes 3 hours more to be filled. If the tank is completely filled, then the leak will empty it in how many hours?

(a) 72

(b) 84

(c) 90

(d) 60

(e) 75

Ans.(c)

Sol.

Let leak empty it in x hr, then

$\frac{1}{15} - \frac{1}{x} = \frac{1}{18}$

$\frac{1}{x} = \frac{1}{15} - \frac{1}{18}$

x =90 hrs

Q20. A can complete a piece of work in 8 days, A and B together can complete same work in 4.8 days and A, B and C together complete the work in 40/11 days. Find the time taken by A and C together to complete the work?

(a) 120/23 days
(b) 12 days
(c) 17.5 days
(d) 120/29 days
(e) 20 days

Ans.(a)

Sol.

Let total work be 120 units (LCM of 8,4.8 and 40/11)

So, efficiency of A $= \frac{120}{8} = 15\ units/day$

Efficiency of A + B $= \frac{120}{4.8} = 25\ units/day$

Efficiency of A + B + C $= 120 \times \frac{11}{40} = 33\ units/day$

And, efficiency of C $= 33 - 25 = 8\ units/day$

So, required time $= \frac{120}{23}\ days$

Q21. A can write 50 pages in 10 hours and A & B can write 400 pages in 20 hours. Find in how much time B alone can write 60 pages?

(a) 4 hours
(b) 3.5 hours
(c) 2 hours
(d) 5 hours
(e) 15 hours

Ans.(a)

Sol.

Efficiency of A $= \frac{50}{10} = 5\ pages\ per\ hour$

Efficiency of A and B $= \frac{400}{20} = 20\ pages\ per\ hour$

Efficiency of B = (20 – 5) = 15 pages per hour

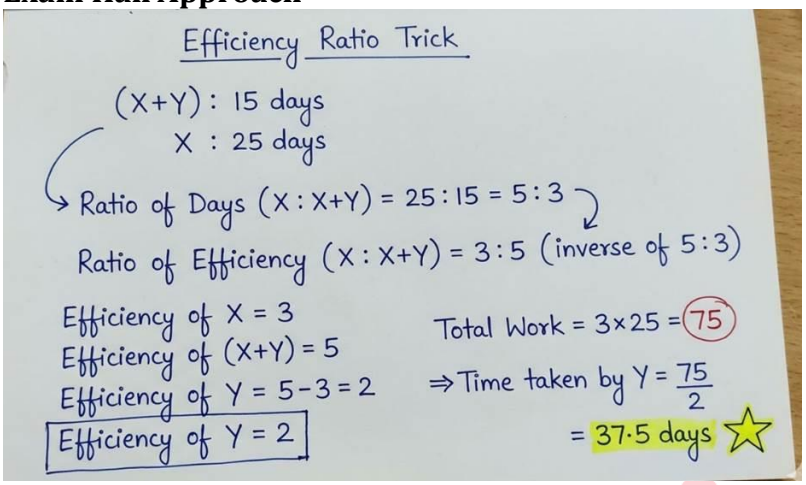
Require time $= \frac{60}{15} = 4\ hours$

Q22. A is 40% more efficient than B. If B takes 6 days more than A to complete a work alone then in how many days 'A' alone can complete the whole work.
(a) 10 days
(b) 15 days
(c) 21 days
(d) 24 days
(e) 12 days
Ans.(b)
Sol. A is 40% more efficient than B
B takes 6 days more than A
Concept Used
Work and Efficiency
Formula Used
Efficiency∝1/Time
Solution
A:B=140:100
=7:5
Time ratio=5:7
7-5=2 units
2 units=6 days
1 unit=3 days
A=5×3
=15 days

Q23. X and Y together can complete a work in 15 days. X alone can do it in 25 days. How many days will Y alone take?
(a) 37.5
(b) 42.5
(c) 40
(d) 33.5
(e) 45
Ans.(a)
Sol.
Information Given in the Question:
X + Y can complete work in 15 days
X alone can complete work in 25 days
Find time taken by Y alone
Concept/Formula Used in the Question:
LCM Method (Work & Time)
Work = LCM of given times
Efficiency = Work done per day
Detailed Explanation:
Take LCM of 15 and 25 = 75 units (Total work)
Work done per day:
X + Y = 75 / 15 = 5 units/day
X alone = 75 / 25 = 3 units/day
So, work done by Y:

Y = (X + Y) - X
= 5 - 3 = 2 units/day
Time taken by Y = Total work / Y's work per day
= 75 / 2 = 37.5 days

Exam Hall Approach



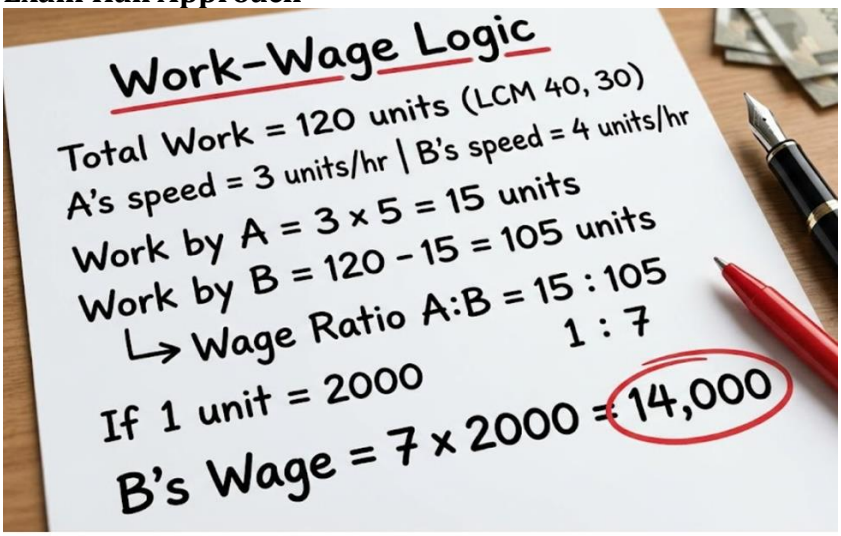
Q24. A and B can do a work in 40 hours and 30 hours respectively. A worked for 5 hours and the remaining work was completed by B. If A received total wages of Rs 2000 then find the wages received by B.

(a) 70000 Rs
(b) 12000 Rs
(c) 14000 Rs
(d) 1000 Rs
(e) None of these

Ans.(c)

Sol. Total work = 120 (LCM of 40, 30)
Efficiency of A = 120/40 = 3 units/hour
Efficiency of B = 120/30 = 4 units/hour
Ratio of wage = 3×5 : 120-15 = 15 : 105 = 1 : 7
Wage get by B = 7/1×2000=14000 Rs

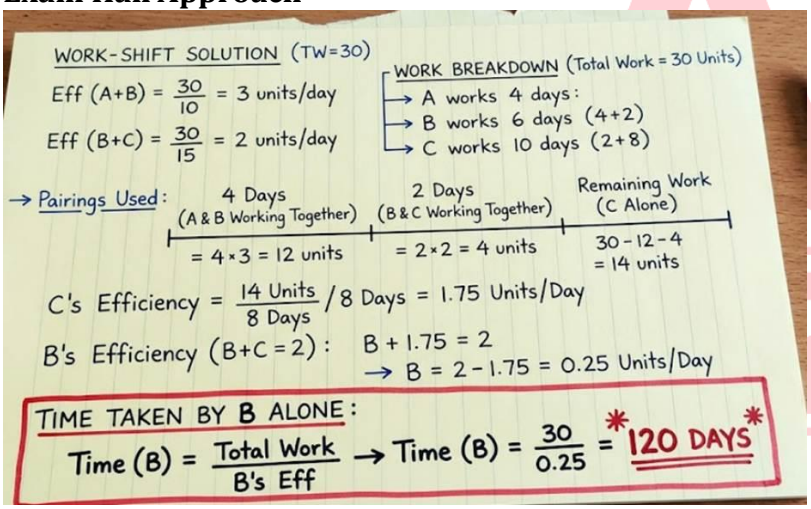
Exam Hall Approach



Q25. P and Q together can complete the work in 80/7 days and P alone can complete the same work in 20 days. If R is 66.67% more efficient than Q, then find the time (in days) taken by P, Q and R together to complete the whole work (approx.).
(a) 3
(b) 7
(c) 12
(d) 15
(e) 20
Ans.(b)
Sol. Given
P and Q together complete the work in 80/7 days
P alone completes the work in 20 days
R is 66.67% more efficient than Q
Concept Used
Efficiency = Work / Time
If a person is more efficient, then work rate increases proportionally.
Total efficiency = Sum of individual efficiencies
Time = Total Work / Total Efficiency
Explanation:
Let the total work (LCM of 80/7 and 20) = 80 units
Efficiency of P and Q= 80/(80/7)=7 units/day
Efficiency of P = 80/20=4 units/day
Efficiency of Q = 7-4=3 units/day
Efficiency of R = 5/3×3=5 units/day
Required Time = 80/ (4+3+5)=6.67 days = 7 days

Q26. A and B together can do a work in 10 days and B and C together can do it in 15 days. A works for 4 days, then B works for 6 days, and the remaining work is completed by C in 10 days. Find the time taken by B alone.
(a) 110 days
(b) 90 days
(c) 140 days
(d) 150 days
(e) 120 days
Ans.(e)
Sol.
Information Given:
A + B = 10 days → Efficiency = 1/10
B + C = 15 days → Efficiency = 1/15
A works 4 days, B works 6 days, C works 10 days
Total work = 1
Concept/Formula Used:
LCM Method (Take total work as LCM of 10 and 15)
LCM(10,15) = 30 units
Efficiency = Work per day

Explanation:
Total work = 30 units
(A + B)'s 1 day work = 30/10 = 3 units
(B + C)'s 1 day work = 30/15 = 2 units
Let individual efficiencies be A, B, C
So,
A + B = 3 ...(1)
B + C = 2 ...(2)
From (1): A = 3 − B
From (2): C = 2 − B
Now total work equation:
4A + 6B + 10C = 30
Substitute:
4(3 − B) + 6B + 10(2 − B) = 30
12 − 4B + 6B + 20 − 10B = 30
32 − 8B = 30
8B = 2
B = 1/4 unit per day
Time taken by B = 30 / (1/4) = 120 days
Exam Hall Approach



Q27. P alone can do a work in 'X' days and with the help of Q he can do the same work in 6 days. If Q is 50% more efficient than P, then find 'X'?
(a) 15
(b) 12
(c) 10
(d) 20
(e) 24
Ans.(a)
Sol. let the efficiency of P = 2a unit/day
so, efficiency of Q = 150% of 2a = 3a unit/day
total work = (2a+3a) x 6 = 30a unit
So, X = 30a/2a = 15

Q28. 12 men and 8 women can complete a work in 24 days. If 4 men leave and 4 women join, they can complete the same work in 24 days. Find the time taken by 20 women to complete double of the same work.

(a) 48 days
(b) 60 days
(c) 72 days
(d) 36 days
(e) 84 days

Ans.(a)

Sol.

Information Given:

12 men + 8 women → complete work in 24 days
If 4 men leave and 4 women join → 8 men + 12 women → complete work in 24 days
Need to find: Time taken by 20 women to complete double work

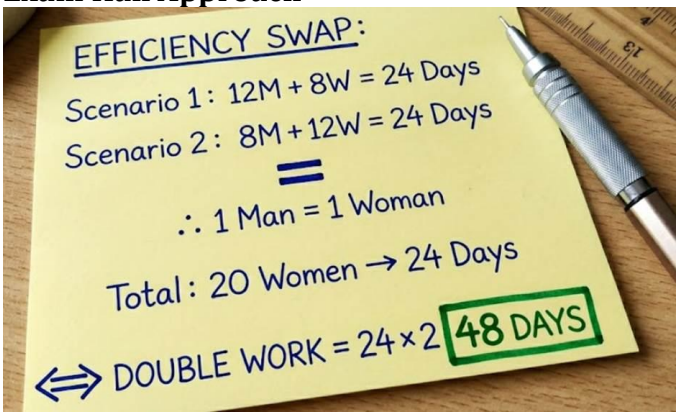
Concept/Formula Used:

Work = Efficiency × Time
Let efficiency of 1 man = m
Efficiency of 1 woman = w

Explanation:

From first condition:
(12m + 8w) × 24 = Total work
From second condition:
(8m + 12w) × 24 = Same total work
So,
12m + 8w = 8m + 12w
4m = 4w
m = w
So, men and women have equal efficiency
Now,
12 men + 8 women = 20 persons
Total work = 20 × 24 = 480 units
Double work = 960 units
Now, 20 women (same efficiency as men):
Efficiency = 20 units/day
Time = 960 / 20 = 48 days

Exam Hall Approach



Q29. A works for x days and earns Rs. 150 per day. B works for 20 days and earns Rs. 200 per day. If they both together earn Rs. 5800, then find the value of x.

(a) 10
(b) 12
(c) 11
(d) 9
(e) 14

Ans.(b)

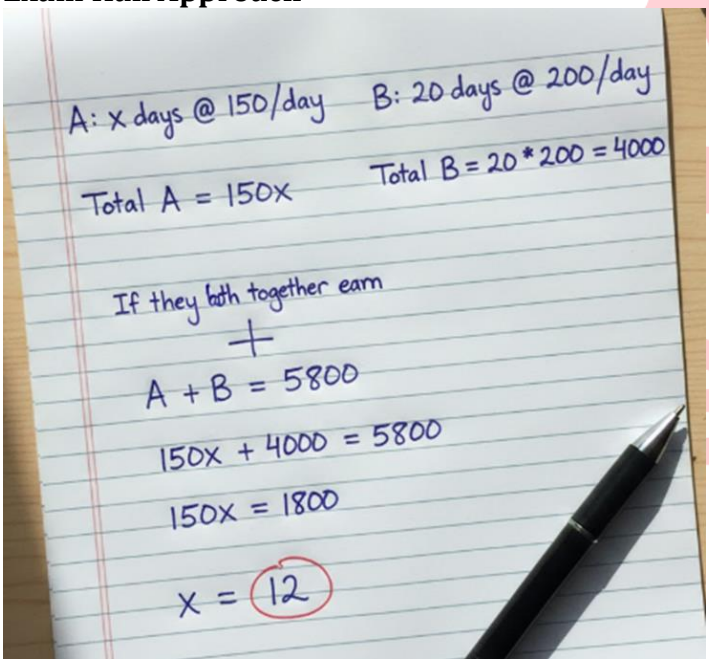
Sol. Information Given:

A works for x days and earns Rs. 150 per day.
B works for 20 days and earns Rs. 200 per day.
They both together earn Rs. 5800.

Basic Explanation:

ATQ,
$x \times 150 + 20 \times 200 = 5800$
$150x = 1800$
$x = 12$

Exam Hall Approach



Q30.

Pipe A can fill a tank in 28 minutes, and pipe B can empty the tank in 84 minutes. If pipe A is opened for 24 minutes and then replaced by pipe B, then in how many minutes will pipe B empty the filled tank?

(a) 28
(b) 72
(c) 45
(d) 64
(e) 29

Ans.(b)

Sol. Information Given:

Pipe A can fill a tank in 28 minutes, and pipe B can empty the tank in 84 minutes.

Pipe A is opened for 24 minutes and then replaced by pipe B.

Basic Explanation:

Let the capacity of the tank = 84 units (LCM of 28 and 84)

Efficiency of pipe A = 84/28=3 units/min

Efficiency of pipe B = 84/84=1 units/min (It is outlet pipe)

Required time = (3×24)/1=72 min