GATE 2021

GENERAL APTITUDE

धमाकेदार ट्रिक के साथ

TIME & WORK -2, QUESTIONS PRACTICE ON BASIC CONCEPT

AVINASH SIR

AVINASH SINGH SIR

GATE | EE (CE)

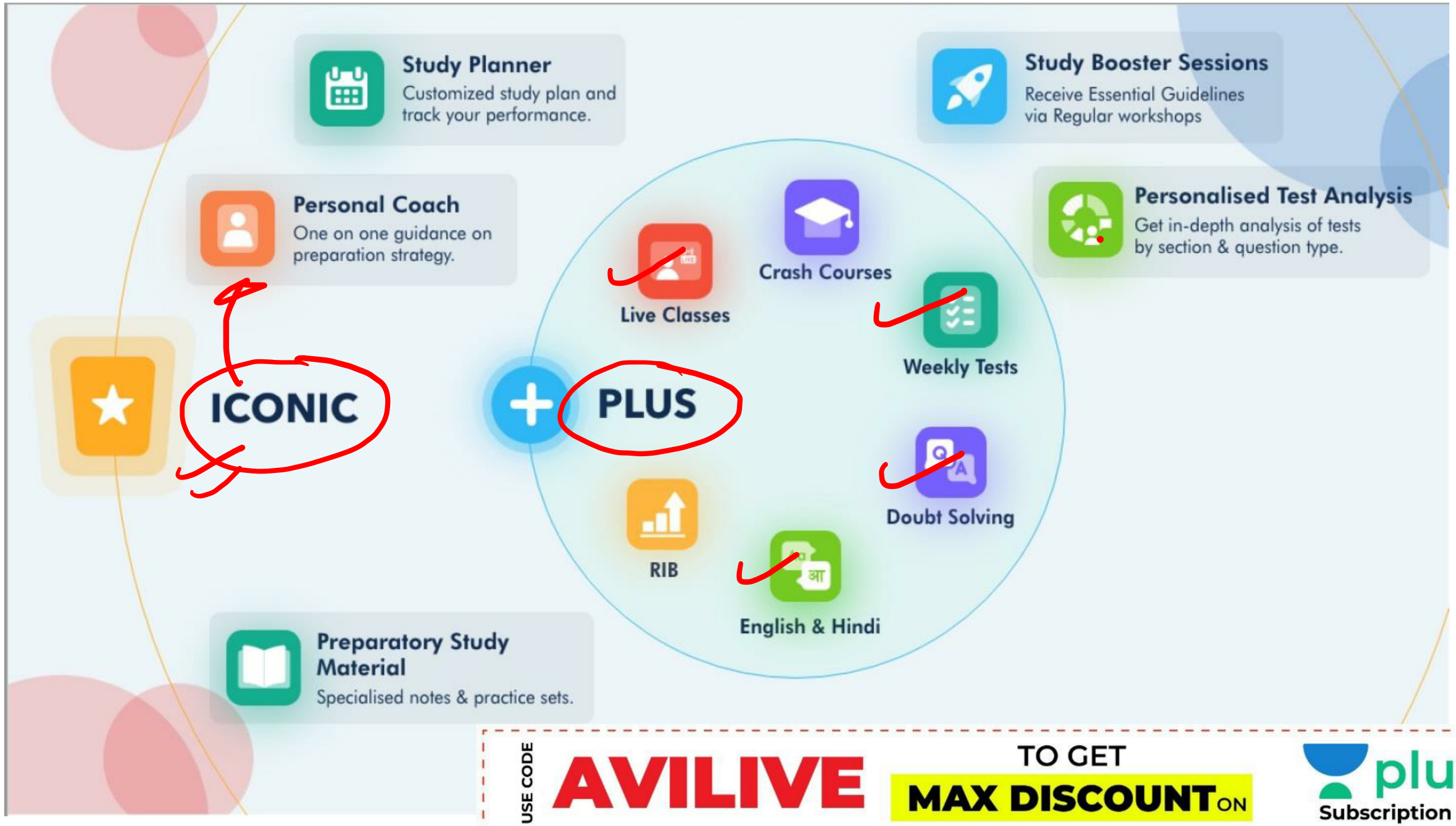
Secured Score 99.86% in
CAT (Quantitative Section)

GATE ESE:

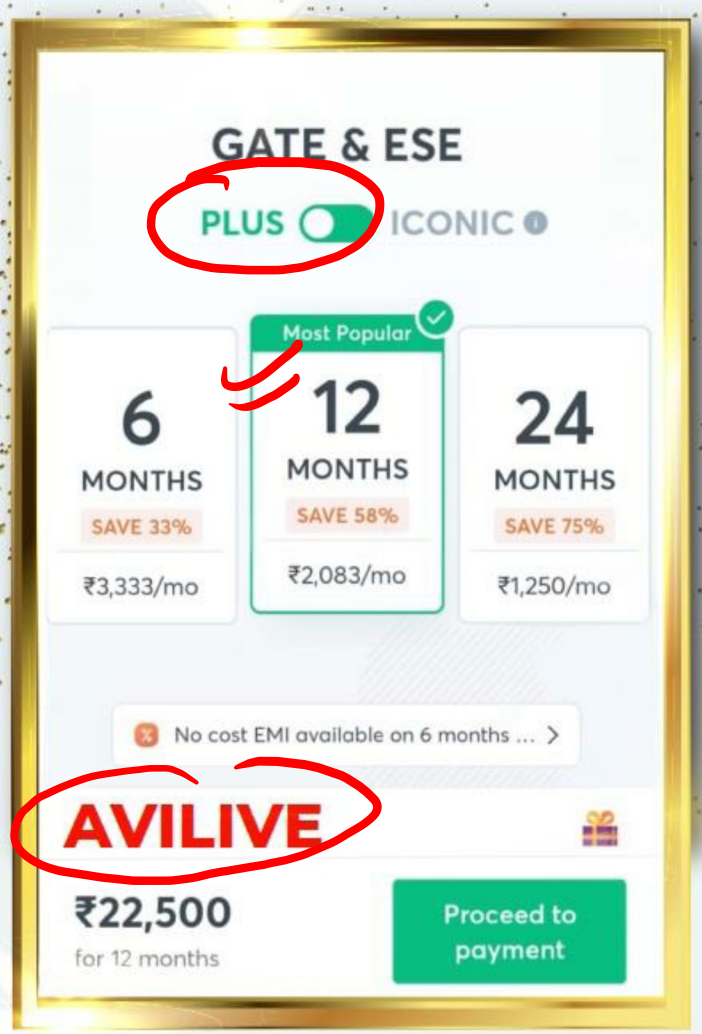
7+ Years Teaching Experience
Mentored 25k+ Students for
GATE, ESE & PSUs

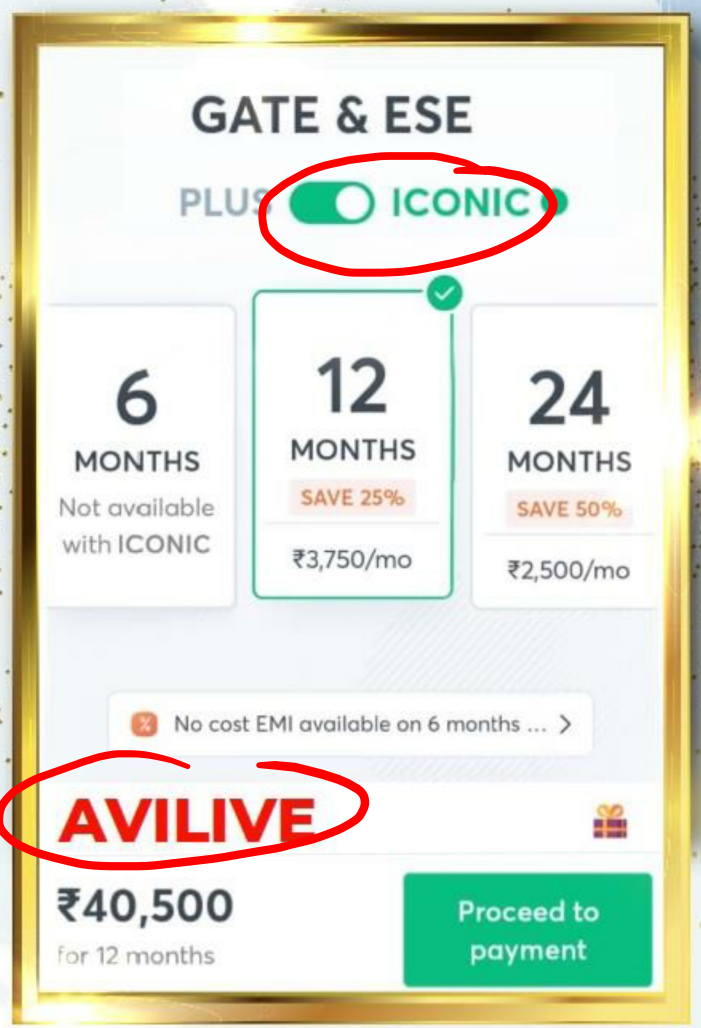
Subjects Taken:

General Aptitude
Engineering Mathematics
Digital Electronics



Complete Package To CRACK GATE/ESE


GATE & ESE
PLUS
ICONIC
Most Popular
6
MONTHS
SAVE 33%
₹3,333/mo
12
MONTHS
SAVE 58%
₹2,083/mo
24
MONTHS
SAVE 75%
₹1,250/mo
No cost EMI available on 6 months ...
AVILIVE
₹22,500
for 12 months
Proceed to payment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MONTHS
SAVE 25%
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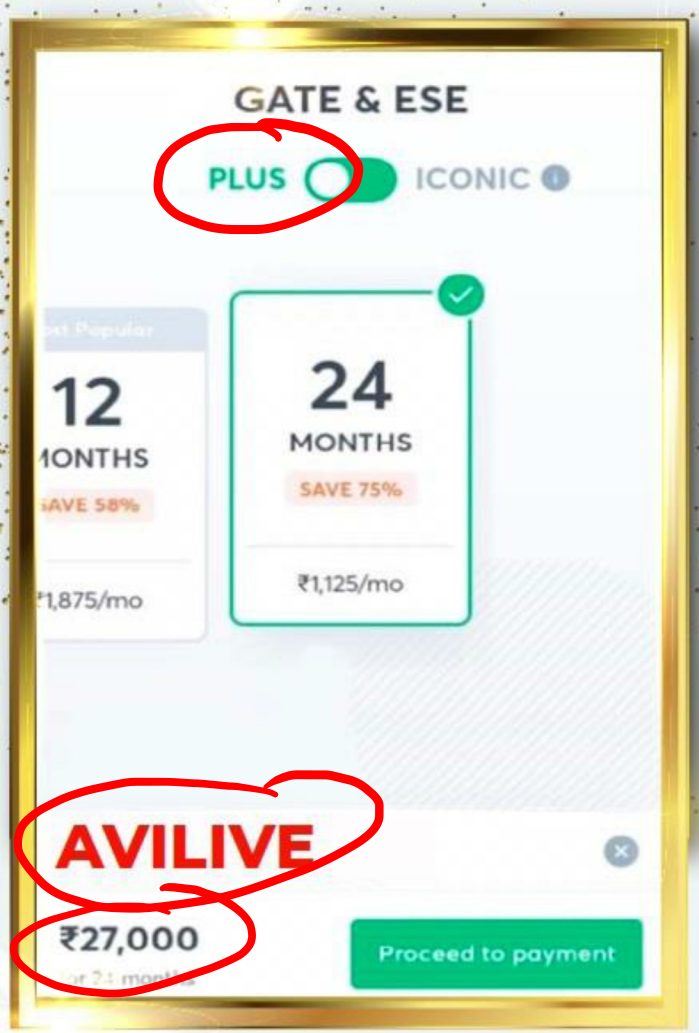
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SAVE 58%
₹1,875/mo
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MONTHS
SAVE 75%
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AVILIVE
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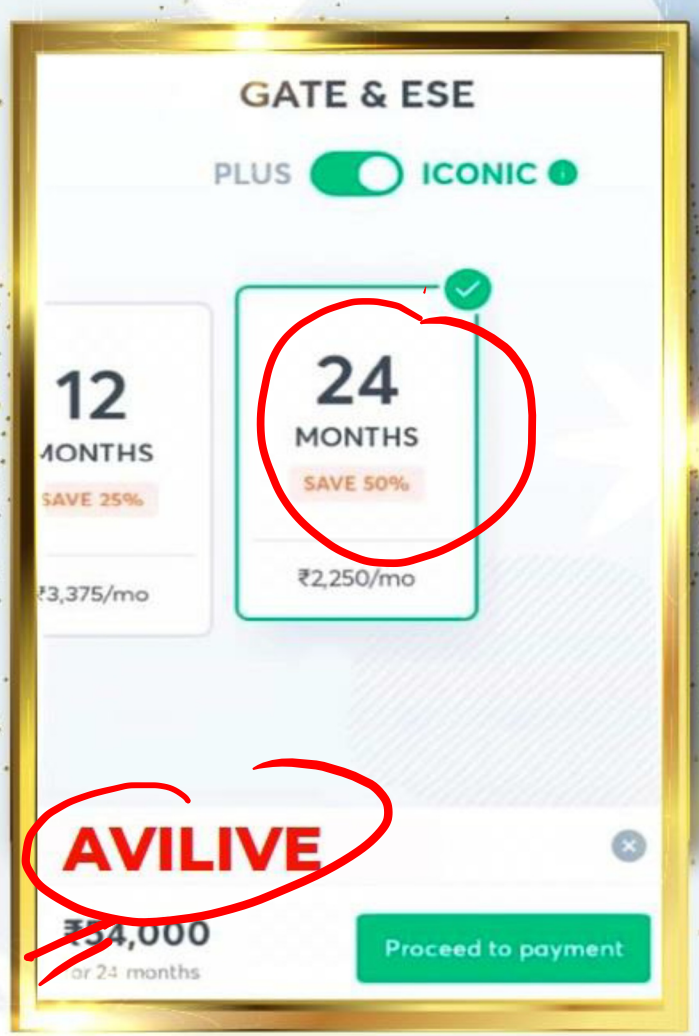

GATE & ESE
PLUS
ICONIC
12
MONTHS
SAVE 25%
₹3,375/mo
24
MONTHS
SAVE 50%
₹2,250/mo
AVILIVE
Proceed to payment

Analytical Aptitude

- Venn Diagram
- Syllogism
- Series
- Coding & Decoding
- Odd Man out
- Distance & Direction
- Blood Relation
- Seating Arrangements
- Clock & Calendar

Quantitative Aptitude

- Number System
- Sequence & Series
- Ratio & Proportion
- Time, Speed & Distance
- Percentage
- Profit, Loss & Discount
- Average
- Allegation & Mixture
- Time & Work
- Powers, exponents and logarithms
- Algebra
- Permutation & Combination
- Probability
- Data Interpretation
- Mensuration and geometry

Spatial Aptitude

- Shape Matching – Two Dimensional
- Visual Comparison – Two Dimensional
- Group Rotation – Two Dimensional
- Combining Two Dimensional Shapes
- Cube Views in Three Dimensions
- Cubes in Two and Three Dimensions
- Other Solids in Two and Three Dimensions
- Block Counting in Three Dimensions
- Two-Dimensional Mirror Reflections
- Paper folding and Cutting

The difference between the sum of the first 2n natural numbers and the sum of the first n odd numbers is **[GATE 2020, CH, BT]**

(A) $2^n - n$ (B) $n^2 - n$ (C) $2^n + n$ (D) $n^n + n$

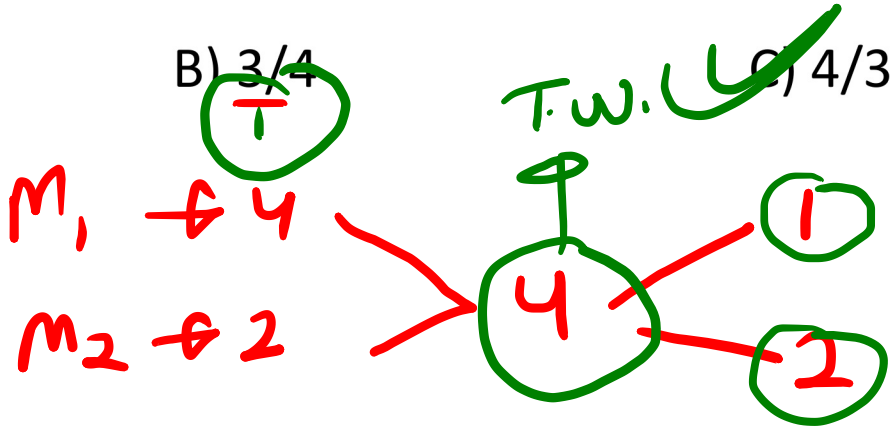
$n^2 + n$

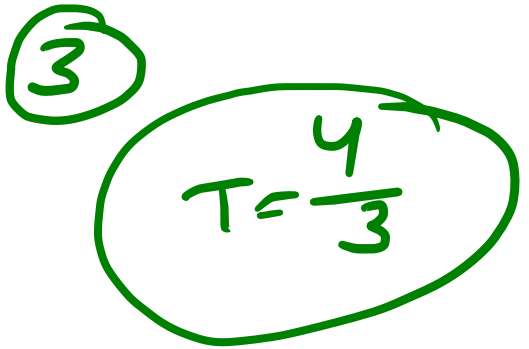
Home Work Question

It would take one machine 4 hours to complete a production order and another machine 2 hours to complete the same order. If both machine work simultaneously at their respective constant rates, the time taken to complete the same order is _____ hours.

[GATE-2019, EC]

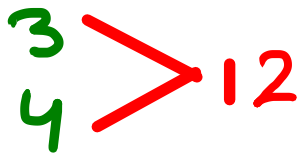
A) 2/3 B) 3/4 C) 4/3 D) 7/3

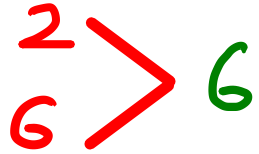


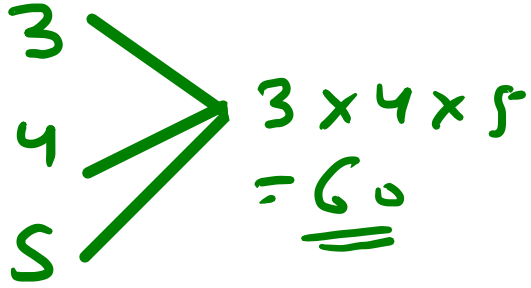


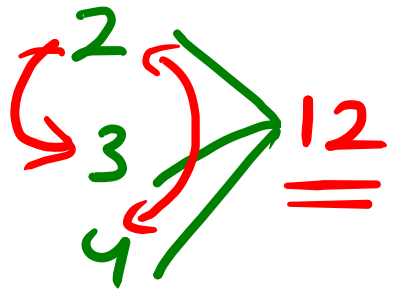
LCM Fast Calculation

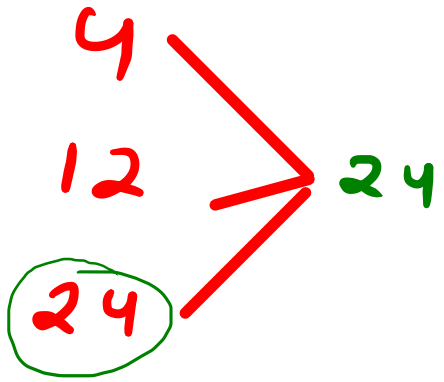
Least Common Multiple



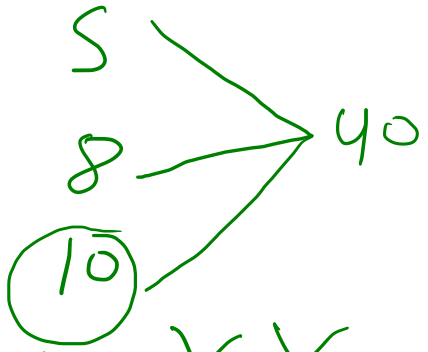




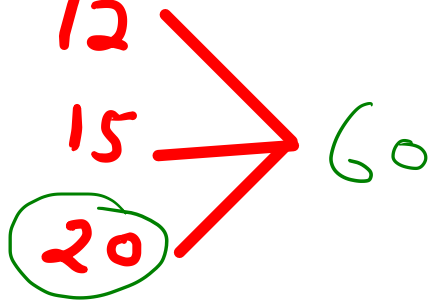




24, 48, - - -

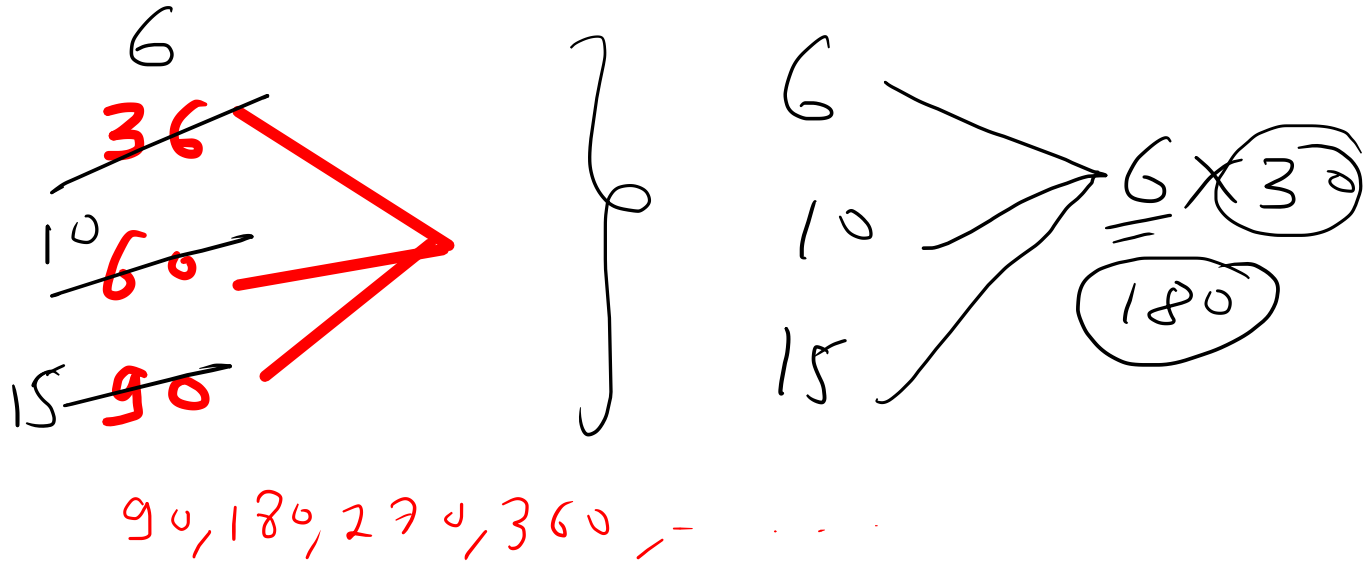


10, 20, 30, 40, 50

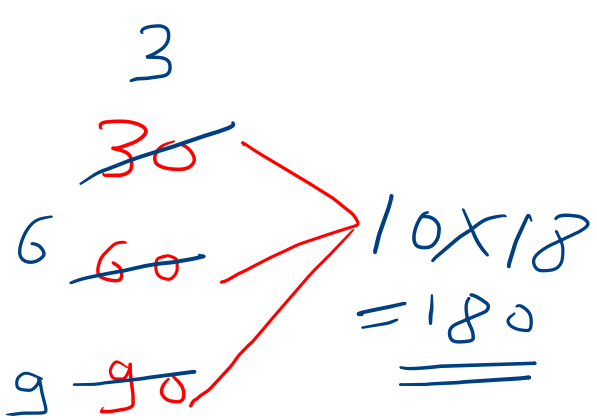


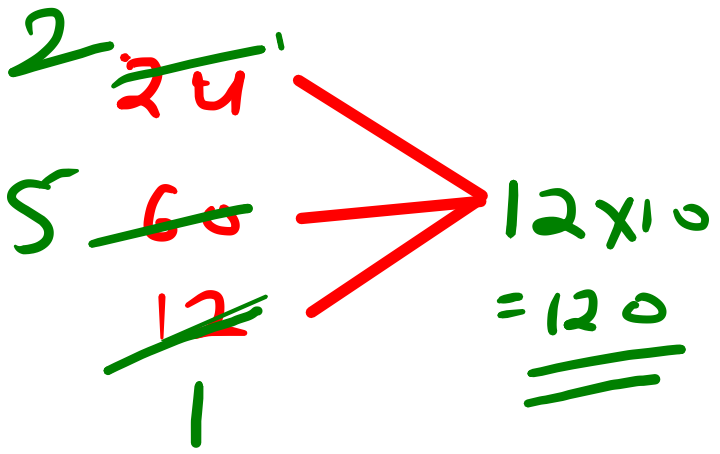
20, 40, 60, 80, - - -

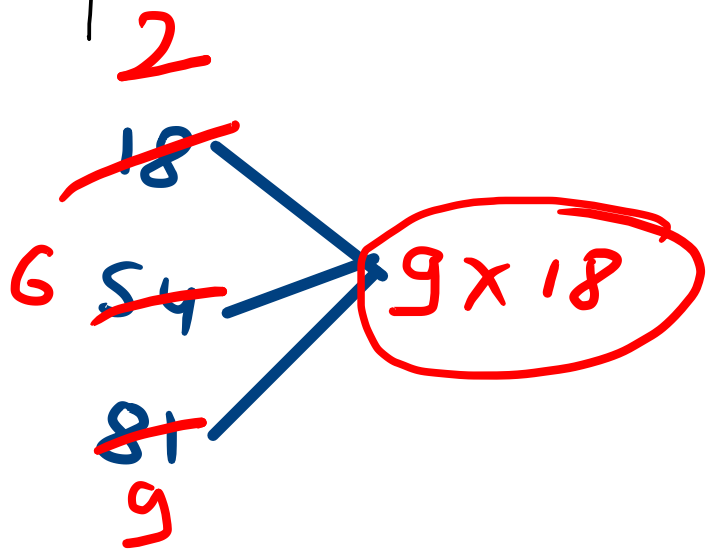
LCM Fast Calculation



90, 180, 270, 360, - - - -







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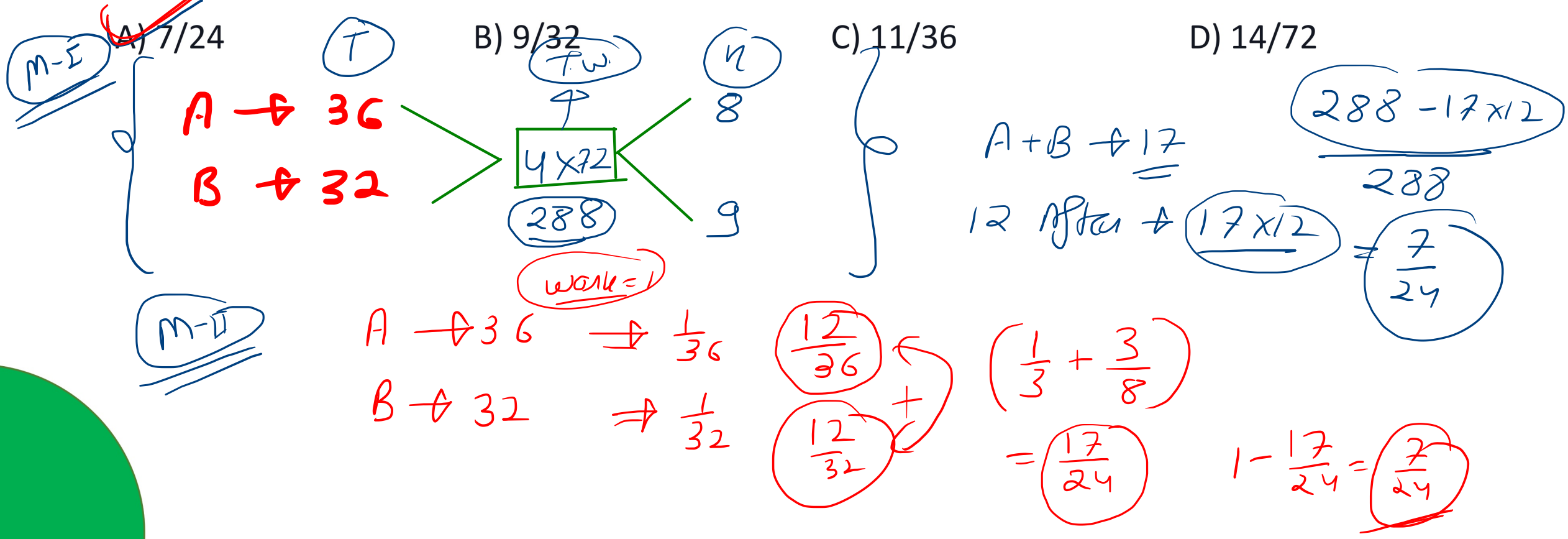
1) A can do a work in 36 days and B in 32 days. if they work on it together for 12 days, then what fraction of work is left?

A) 7/24 B) 9/32 C) 11/36 D) 14/72



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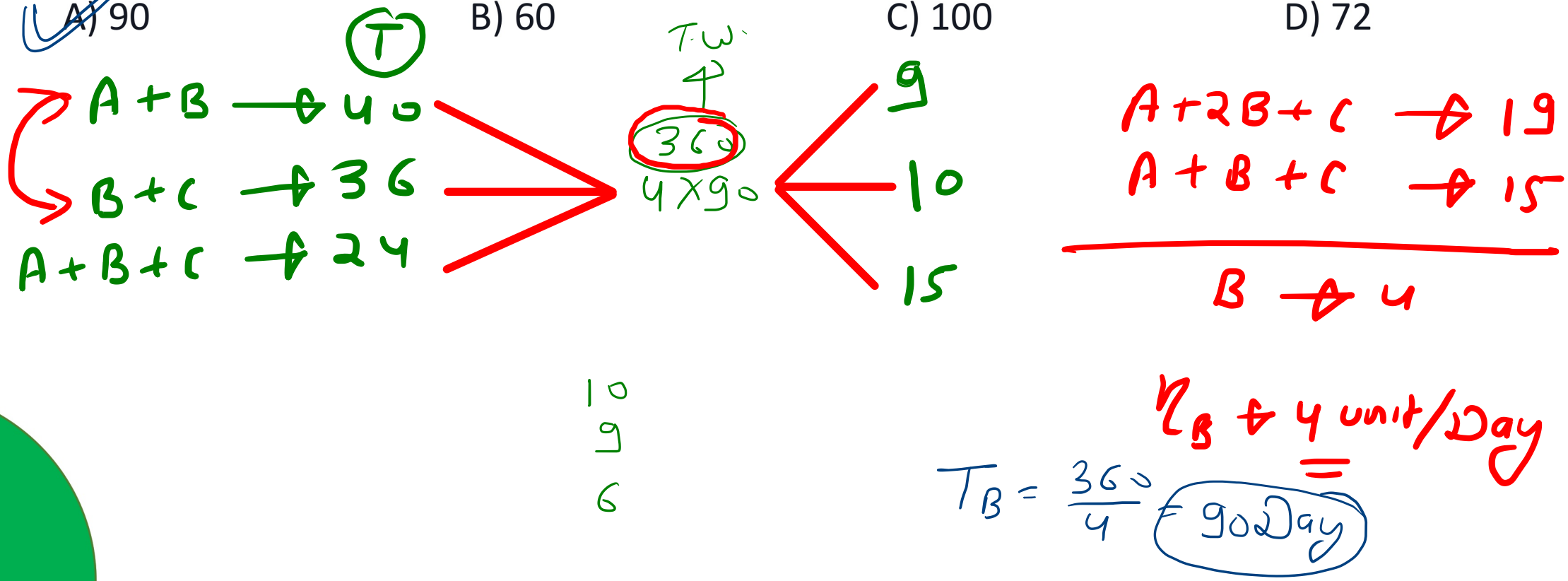
2) Working together A and B can do a job in 40 days, B and C in 36 days and all three together in 24 days in how many days can B alone do the job?

A) 90 B) 60 C) 100 D) 72



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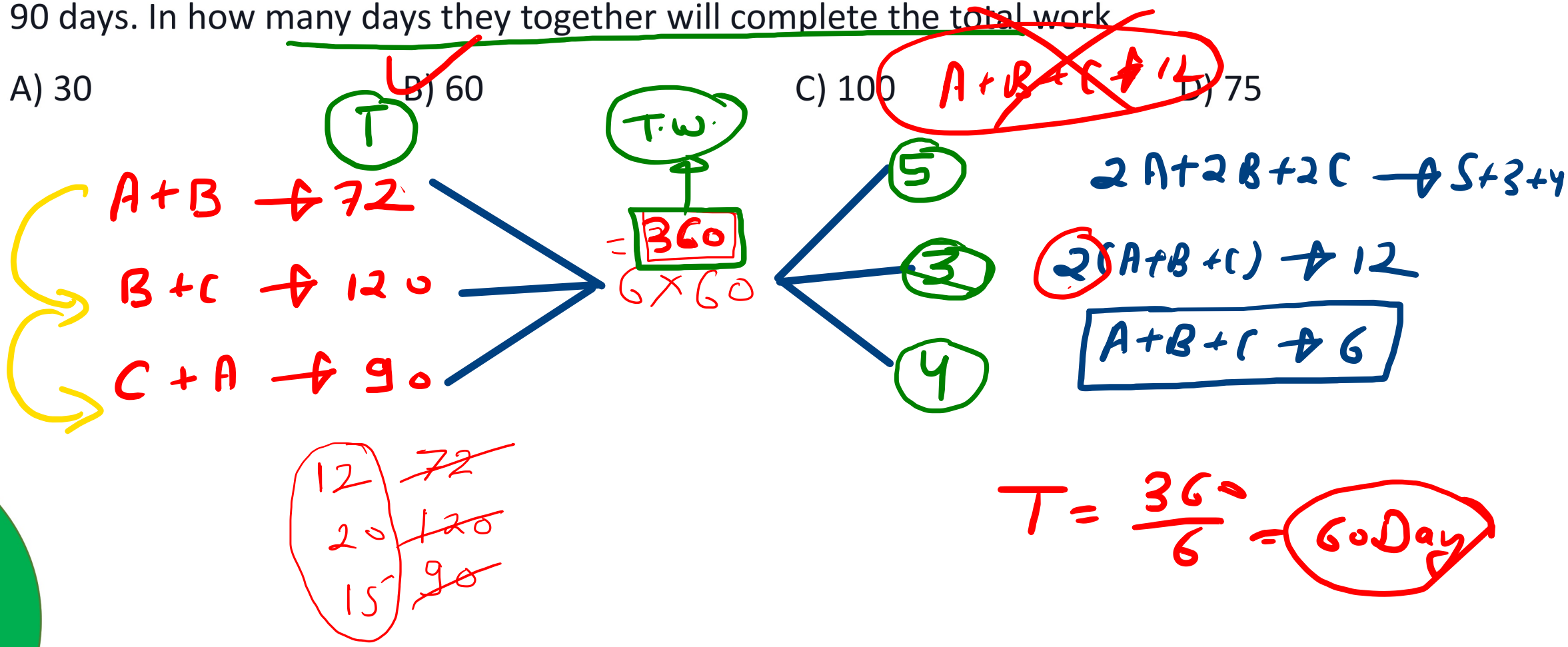
3) A & B together can do a work in 72 days, B & C together in 120 days, C & A together in 90 days. In how many days they together will complete the total work

A) 30 B) 60 C) 100 D) 75

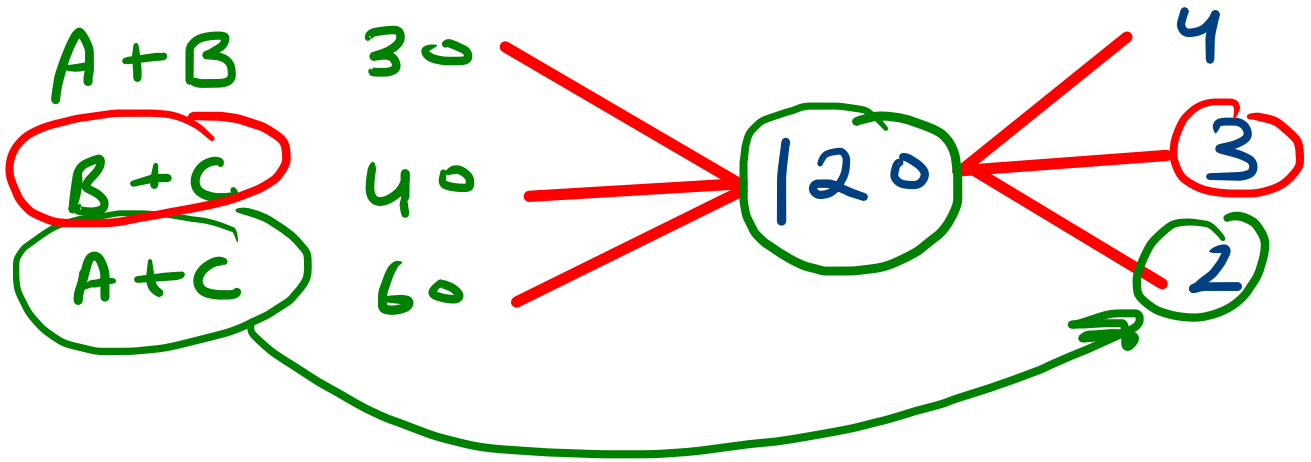


$T_A = \frac{120}{1.5} = \frac{120}{15}$

xxx

4) A and B can do a piece of work in 30 days, B and C can do it in 40 days. A and C can do it in 60 days. In how many days can B alone do it? **[UPPCL-2016]**

A) 80 B) 120 C) 240 D) 48



$2(A+B+C) \Rightarrow 9$

$A+B+C \rightarrow 4.5$

$A+C \rightarrow 2$

$B \rightarrow 2.5$

$\eta_B = 4.5$ unit/day

$A+B+C \rightarrow 4.5$

$B+C \rightarrow 3$

$A \rightarrow 1.5$

$T_B = \frac{120}{2.5} = 48$

***

5) A do 50% of the work in 16 days B can do 1/4th of the work in 24 days. In how many days they together will complete the total work ?

A) 20 days B) 25 days C) 24 days D) 26 days

M-II

A ⇒ 50% → 16 Day

25% → 8 Day

75% → 24 Day

B ⇒ 25% → 24 Day

100% → 24 Day

M-I

A → 32 → 4

B → 96 → 12

32 × 3 = 96 (4)

3

1

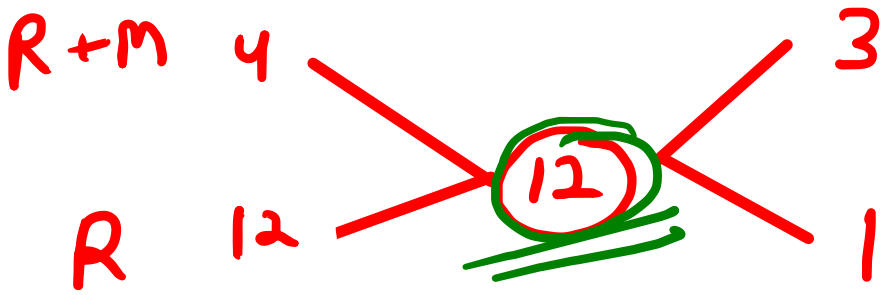
A + B → 4

$\frac{96}{4} = 24$

6) When Ram and Mohan work together, they complete a work in 4 days. If Ram alone can complete this work in 12 days then in how many days Mohan alone can complete this work?

[RRB-2014(JE), BILASPUR]

A) 10 days B) 8 days C) 6 days D) 16 days



$(R+m)_\eta \rightarrow 3$

$R \downarrow 1 \quad m \downarrow 2$

$T_m = \frac{12}{1} = 6\,\text{Day}$

$m_\eta = 2\ \text{unit/Day}$

7) Ajeet can do a job 10 days. Raman can do the same job in 20 days. They together start doing the job but after 4 days Raman leaves. How many more days will be required by Ajeet to complete this job alone?

A) 4 B) 2 C) 5 D) 3

Home Work Question

It takes two hours for a person X to mow the lawn. Y can mow the same lawn in four hours. How long (in minutes) will it take X and Y, if they work together to mow the lawn?

[GATE-2019, 1 MARK (CS, CE)]

A) 60 B) 80 C) 90 D) 120

Avinash Singh

Teaching isn't my job, it's my passion

5:00 PM
GATE/PSUs/ESE
AE/JE

16 Watch mins	16 Watch mins (last 30 days)	0 Followers

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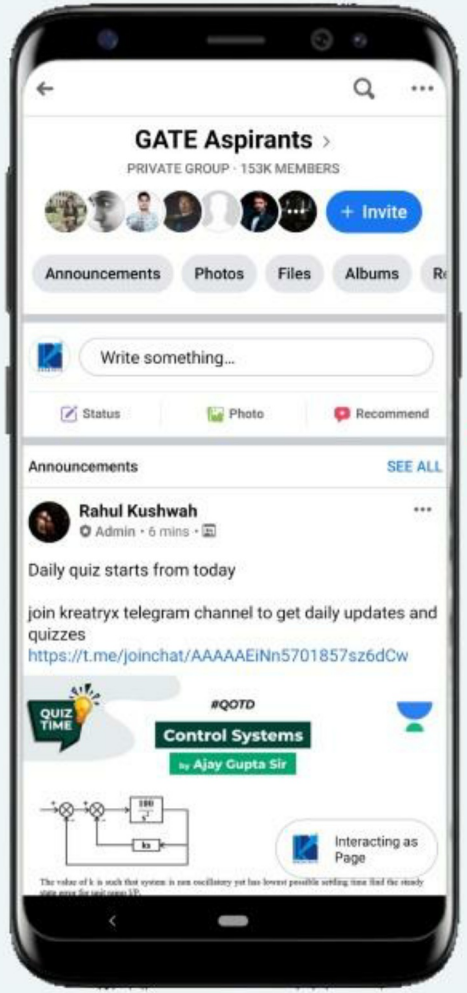

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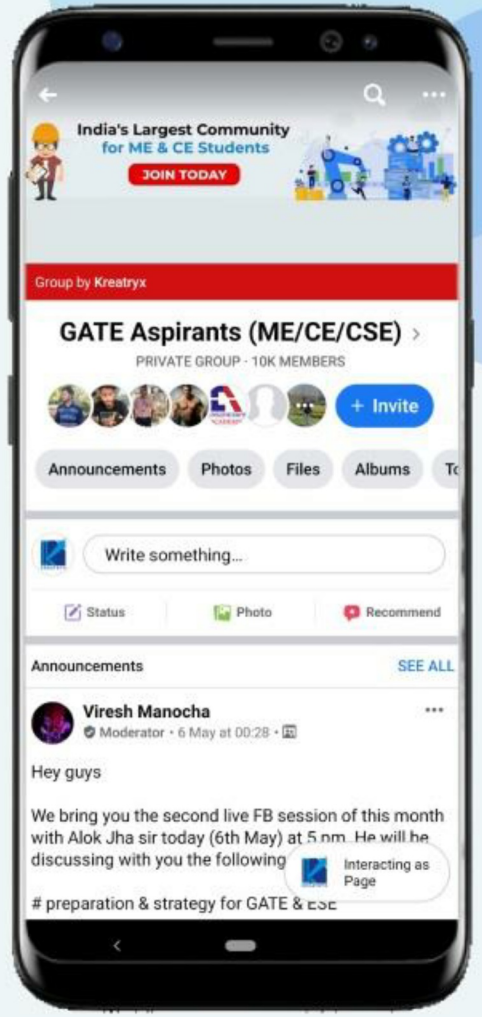

Thank You