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Sahi Prep Hai Toh Life Set Hai

Doubt Session

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INSTRUCTIONS FOR ATTACHING DOUBTS FOR FURTHER DOUBT SESSION

- If a doubt is not attached properly, it will not taken in the class.
- None of the question which is discussed in class will be taken in doubt session, if you haven't revised the class.
- Without options and without mentioning which option is correct, no doubts will be entertained.
- Maximum numbers of doubts, a student can ask in doubt session is 5.
- Please send all your doubts atleast 24 hours before Doubt Class.

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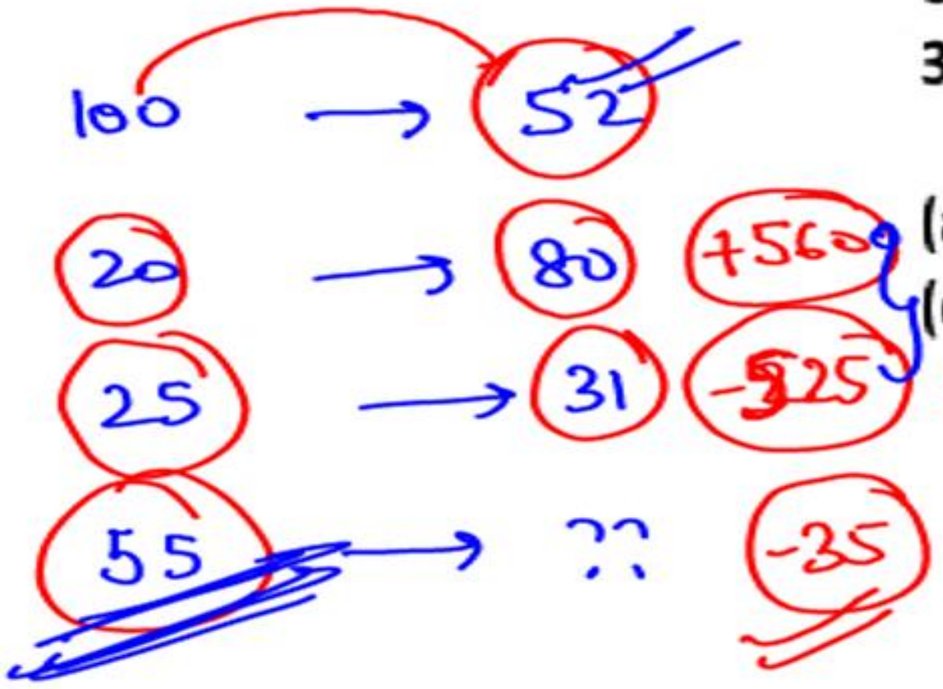
Arithmetic Mean → Average



Q3. The arithmetic mean of the scores of a group of students in a test was 52. The brightest 20% of them secured a mean score of 80 and the dullest 25% a mean score of 31. The mean score of remaining 55% is :

(a) 45%
(b) 50%
(c) 51.4% approx.
(d) 54.6% approx.

$52 - \frac{35}{55}^{7}$ 11

$52 - 0.63$

≈ 51.37

Shreya

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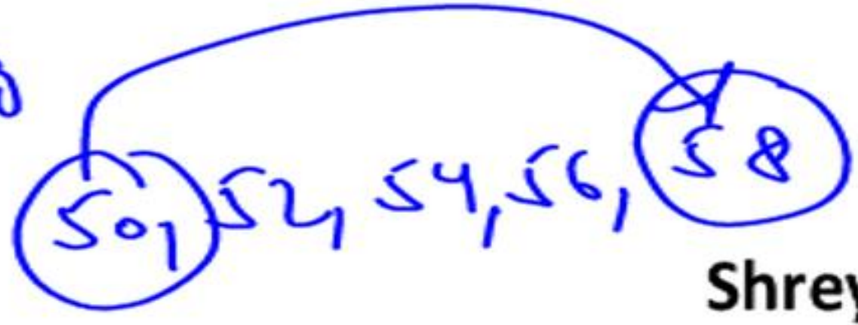
Q16. 5 members of a team are weighed consecutively and their average weight calculated after each member is weighed. If the average weight increased by one kg each time, how much heavier is the last player than the first one?

(a) 4 kg **(b) 20 kg**

(c) 8 kg **(d) 5 kg**



Shreya

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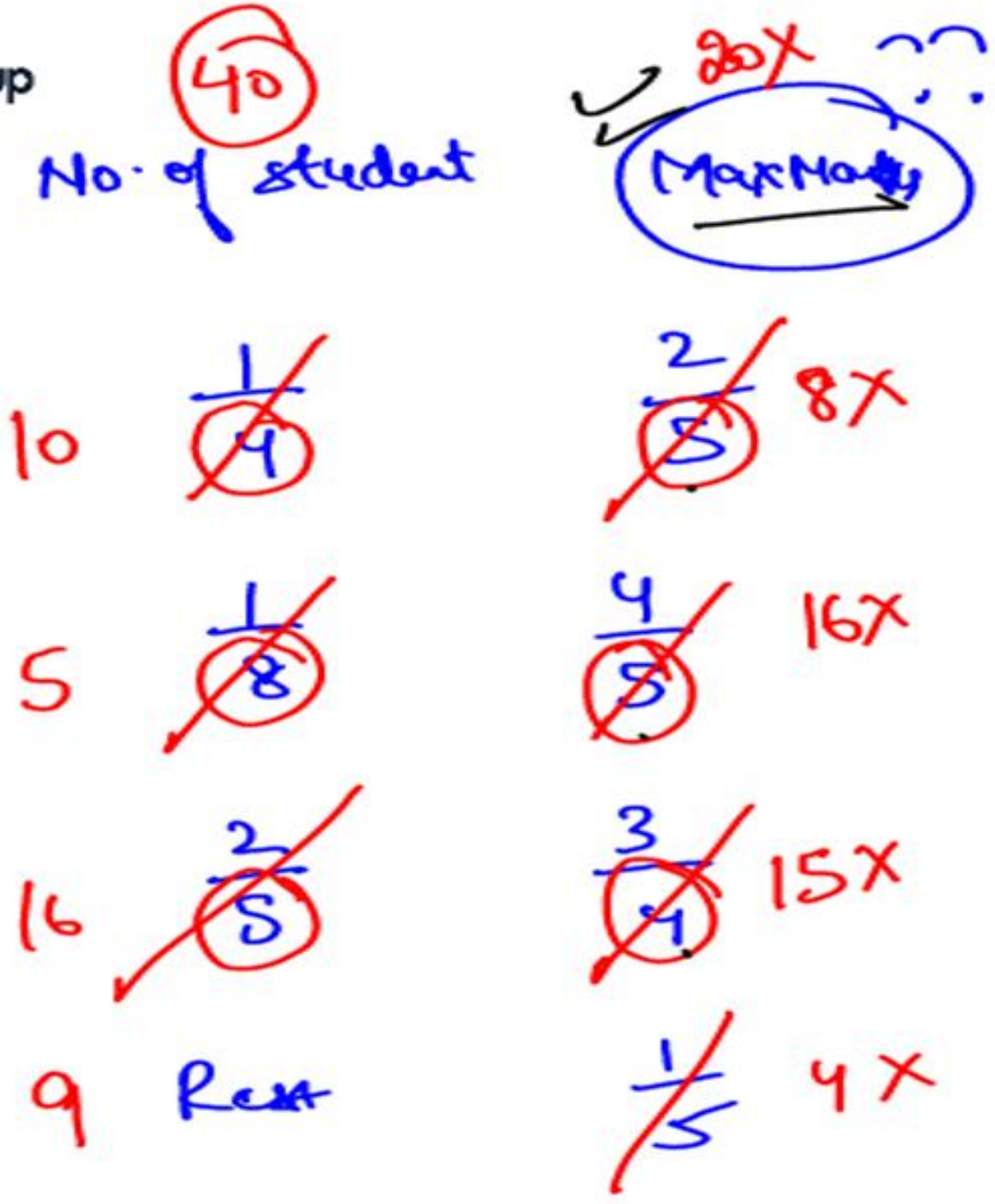

Q18. Average marks of 1/4th of the total no. students is 2/5th of the total marks. Average marks 1/8th of total no. of students is 4/5th of the tot marks. Average marks of 2/5th of the total no. students got 3/4th of the total marks and average rest no. of students is 1/5th times of the total mark If average marks of all students is 327. Find maximu marks of the exam.

(a) 450
(b) 500
(c) 600
(d) 650

$10 \cdot 8X + 5 \cdot 16X + 16 \cdot 15X + 9 \cdot 4X$

$\longrightarrow 327 - 40$

$\frac{4}{43}X = \frac{3}{327 - 40}^{10}$

$X = 30$

Shreya

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41. A man whose bowling average is 12.4 takes 5 wickets for 26 runs and thereby decreases his average by 0.4. How many wickets he had taken before this last match?

Bowling Avg = 12.4

26 Runs | 5 wickets

↓ 0.4

$$12.4 = \frac{\text{Runs}}{x}$$

$$\text{Runs} = 12.4x$$

$$\frac{12.4x + 26}{x + 5} = 12$$

$$12.4x + 26 = 12x + 60$$

$$0.4x = 34$$

$$x = 85$$

No name

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BA

12·4

26|sw

10·4

12

logical App

$\frac{34}{0·4} = 85$

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Hindi Y

. एक बल्लेबाज 17वीं पारी में 87 रन बनाता है और इस प्रकार उसका औसत 3 रन बढ़ जाता है। 17वीं पारी के बाद उसका औसत ज्ञात कीजिए।

(1) 39
(2) 87
(3) 90
(4) 84

No name

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Delhi Zone : 1st Sitt

2. एक टीम के 5 सदस्यों के भार को क्रमानुसार मापा गया और उनके औसत भार की गणना प्रत्येक सदस्य का भार लेने के बाद की गई। तदनुसार, यदि हर बार, औसत भार में 1 किग्रा की वृद्धि हुई हो, तो अंतिम खिलाड़ी का भार पहले खिलाड़ी से कितना ज़्यादा है?

(1) 4 किग्रा (2) 20 किग्रा

(3) 8 किग्रा (4) 5 किग्रा

Hindi

Same we discussed in Eng

No name

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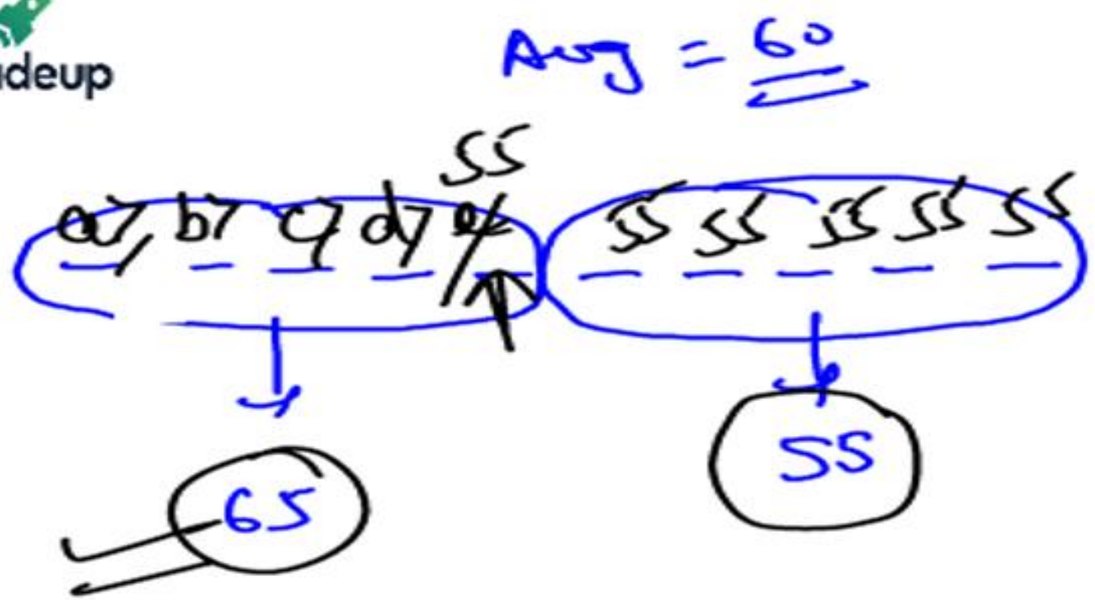

Q19. The average score in an examination of 10 students of a class is 60. If the scores of the top five students are not considered the average score of the remaining students falls by 5. The pass mark was 40 and the maximum mark was 100. It is also known that none of students failed. If each of the top five scorers had distinct integral scores, the maximum possible score of the topper is :

(a) 99 (b) 100
(c) 87 (d) 95

$$a+b+c+d+e = 325$$

$$a_{max} + (b+c+d+e)_{min} = 325$$

$$a_{max} + 50 + 57 + 56 + 55 = 325$$

$$a_{max} = 99$$

$a_{min} = ??$

63 66 65 64 63

$a_{min} \Rightarrow 67$

No name

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Boys & Girls → A

B : G

3 : 1

(A+1) : ??

A-3

Q13. The average score of a-class of boys and girls in an examination is A. The ratio of boys and girls in the class is 3 :1. If the average score of the boys is A+1 , the average score of the girls is

(a) A+1 **(b) A-1**

(c) A+3 **(d) A-3**

Boys & Girls → A

B : G

2 : 5

A-20 ?? = A+8

No name

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No of Students	Avg exp/ student/day	Total Exp
35	x	35x
42	(x+1)	35x+42

Q17. There were 35 students in a hostel. If the number of students are increased by 7 the expenditure on food increases by Rs. 42 per day while the average expenditure of students is reduced by Rs. 1 what was the initial expenditure on food per day?

(a) Rs. 400 (b) Rs.432

(c) Rs.442 (d) Rs.420

$$42(x+1) = 35x + x^2$$

$$7x = 84$$

$$x = 12$$

No name

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DOM

Q18. Average marks of 1/4th of the total no. of students is 2/5th of the total marks. Average marks of 1/8th of total no. of students is 4/5th of the total marks. Average marks of 2/5th of the total no. of students got 3/4th of the total marks and average of rest no. of students is 1/5th times of the total marks. If average marks of all students is 327. Find maximum marks of the exam.

(a) 450
(b) 500
(c) 600
(d) 650

Abhishek

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30 → 14year 4month

35 → 13year 9month

Youngest → 9year 11month

Remaining 4 → ??

Q10. The average age of 30 students of a class is 14 years 4 months. After admission of 5 new student in the class the average becomes 13 years 9 months. The youngest one of the five new students is 9 years 11 month old. The average age of the remaining 4 new students is

~~(a) 10 years 4 months~~
(b) 12 years 4 months
(c) 11 years 2 months
(d) 13 years 6 months

PYQ of SSC

Time → 2min

Detailed

Sstu → $35 \times 165 - 30 \times (172)$

→ $5775 - 5160$

→ 615

$615 - 119 =$ 496month

$\frac{496}{4} \Rightarrow 124 \rightarrow 10$y 4month

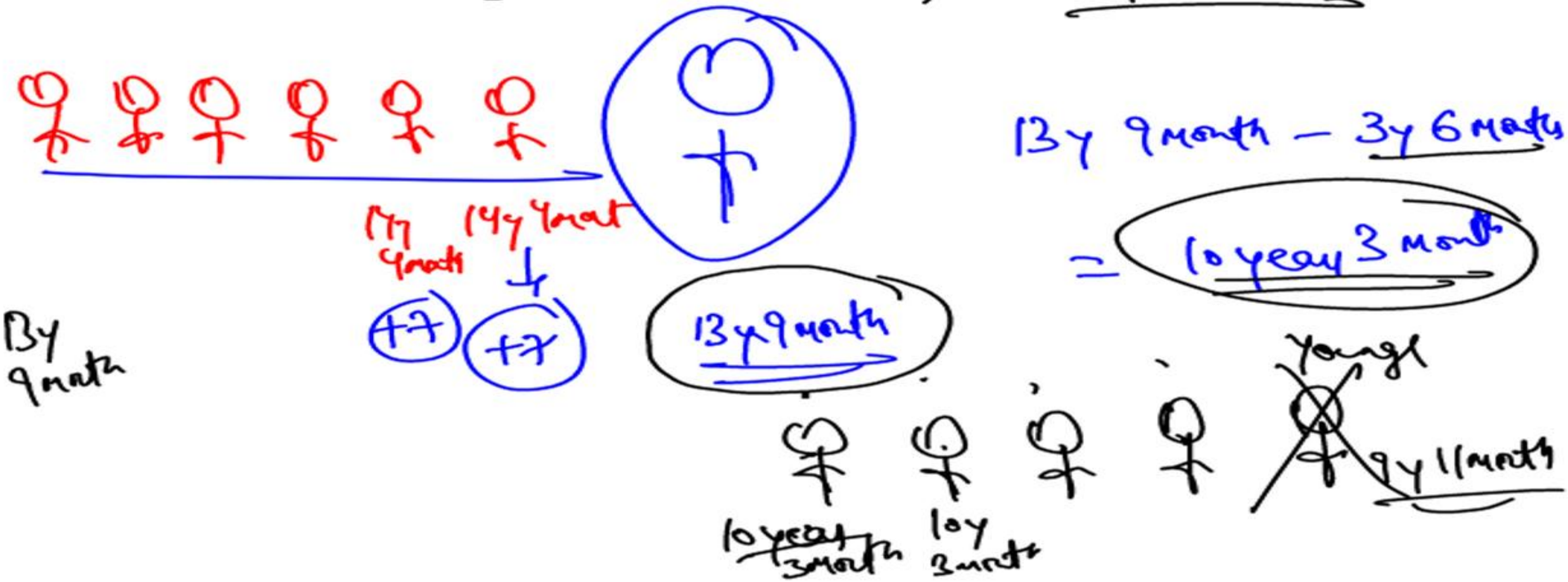
Abhishek

gradeup

6 ~~30~~ students ⟶ 14y 4months

1 ~~5~~ new

35 ⟶ 13y 9months



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Q16. In the afternoon, a student read 100 pages at the rate of 60 pages per hour. In the evening, when she was tired, she read 100 more pages at the rate of 40 pages per hour, What was her average rate of reading, in pages per hour?

(a) 60 (b) 70

(c) 48 (d) 50

100 pg 60 pg/hr $\frac{5}{3}$ hr

100 pg 40 pg/hr $\frac{5}{2}$ hr

I $\frac{200}{\frac{5}{3}+\frac{5}{2}} = \frac{20 \times 6}{25}$

Prajwal

gradeup

Done

Q16. 5 members of a team are weighed consecutively and their average weight calculated after each member is weighed. If the average weight increased by one kg each time, how much heavier is the last player than the first one?

(a) 4 kg
(b) 20 kg
(c) 8 kg
(d) 5 kg

Prajwal

gradeup

Let Fixed → F

Variable → V

$F + 10V = 6000$

$F + 25V = 9000$

$F + 40V = ?$

12000

Q21. A hotel incurs two types of expenses, of which one is fixed and other depend on the number of guests. When there are 10 guests, then the total expenses of hotel are Rs. 6000. Also, when there are 25 guests, then the average expenses per guests are Rs. 360. What will be the total expenses of hotel, when there are 40 guests in the hotel ?

(a) 9000
(b) 10000
(c) 15000
(d) 12000

Prajwal

gradeup

A man purchased two chairs in rupees 900, he sells the 1st chair at 4/5 of its cost price, while the 2nd chair is sold at 5/4 of its cost price. If during the whole transaction he earns the profit of 90 rupees, find the cost price of cheaper chair?

Profit & Loss

Neha

gradeup

If the sum of five consecutive even numbers is 40 more than the average of those numbers, then find the middle number of the series?

— — x — —

$5x = x + 40$

$x = 10$

Neha

gradeup

The average of sales of a furniture shop in the years 2015, 2016, 2017, 2018 is ₹16300, and that of in the years 2016, 2017, 2018, 2019 is ₹18450. If the sales in 2019 are ₹9200, then what are the sales in 2015?

2015 2016 2017 2018 → 16300

2016 2017 2018 2019 → 18450

+2150

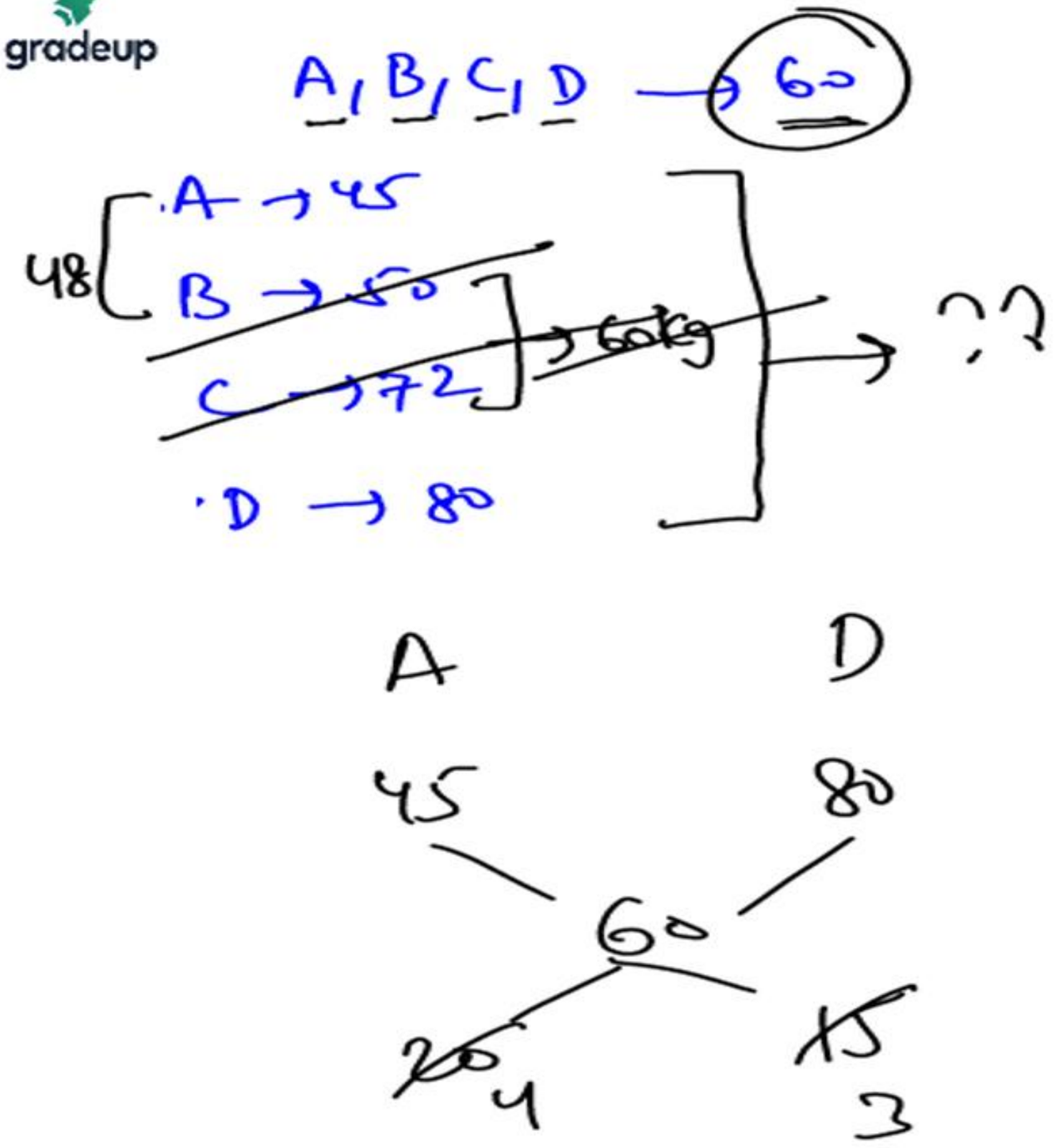
×4

= 8600

9200 − 8600

= 6009

Neha



Q15. The average weight of student in four section A, B, C and D is 60 kg. The average weight of the students A, B, C and D individually are 45 kg, 50 kg, 72 kg and 80 kg respectively. If the average weight of a student of section A and B together is 48 kg and that of B and C is 60 kg. What is the ratio of the no. of students in section A and D ?

(a) 3 : 4
(b) 2 : 3
(c) 5 : 8
(d) 4 : 3

Neha

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40 → 163

37 → 162

A B C → 163·3 + 37

x + x + x − 2

3x = 163·3 + 39

A = ??

x = 163 + 13

176

7. The average height of 40 students is 163 cm. On a particular day, three students namely *A*, *B*, *C* were absent and the average of the remaining 37 students was found to be 162 cm. If *A* and *B* have equal height and the height of *C* be 2 cm less than that of *A*, find the height of *A*.

(1) 170 cm (2) 172 cm

(3) 176 cm (4) 174 cm

Sruthy Sudhakaran

gradeup

$$S_1 - S_2 = \frac{1}{2}(F - M)$$

$$\downarrow \quad \downarrow$$

$$18 - 15 = \frac{1}{2}(47 - M)$$

$$6 = 47 - M$$

$$M = 41$$

13. The difference between the ages of two sisters is half the difference between the ages of their parents. The elder sister is 18 years of age. Their father's age was 32 years when the younger sister was born who is now 15 years old. What is their mother's age?

(1) 40 (2) 41

(3) 42 (4) 43

Time → 75sec

Sruthy Sudhakaran

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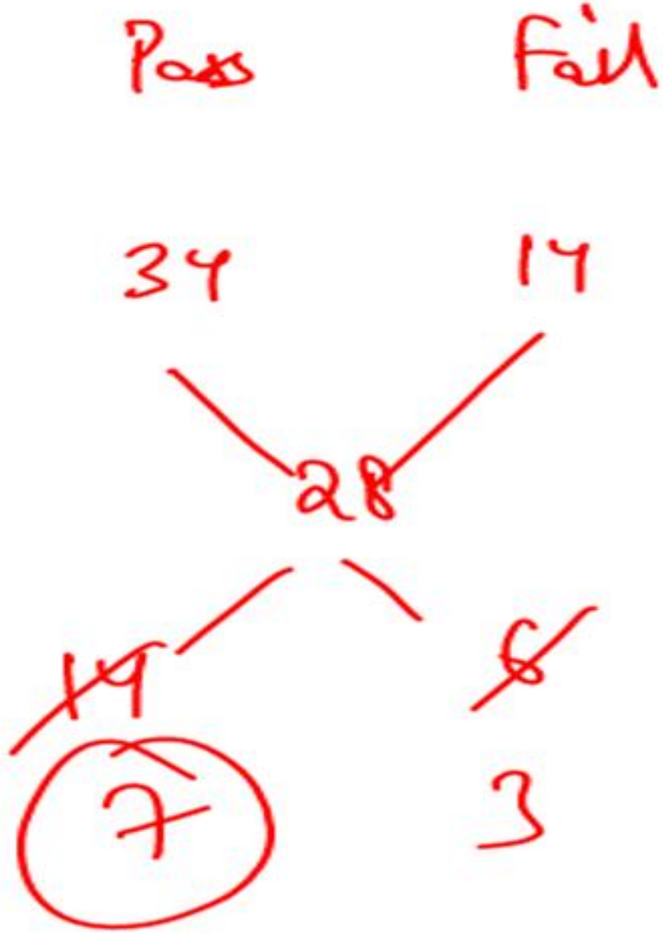

$\frac{7}{14} \times 84 = 56$

The average of the marks obtained by 80 candidates in a certain examination is 28. If the average of passed candidates is 34 and that of failed candidates is 14. What is the number of candidates who passed the examination?

Navya

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38 years + 22 months
2

Q. The average age of 11 players of a cricket team is increased by 2 months when two of them aged 18 years and 20 years are replaced by two new players. The average age of the new players is

(a) 19 years 1 month
(b) 19 years 6 months
(c) 19 years 11 months
(d) 19 years 5 months

Class Question

Navya

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DON

A student calculated the average of 222, 'four-digit numbers'. But due to mistake he reversed the corner digits of a number and thus his average decreased by 13.5. The difference between the unit digit and thousands digit of that number is:

Navya

gradeup

The number of students in Section A and Section B of a class are 40 and 52, respectively. The average score in mathematics of all the students is 75 . If the average score of the students in A is 20% more than that of students in B then what is the average score of students in Section B?

I st

	A	B	
No. of student	40	52	75
	10	13	
Avg	6x	5x	

$$\frac{10 \cdot 6x + 13 \cdot 5x}{23} = 75$$

$$125x = 75 \cdot 23$$

$$5x = 69$$

75sec

Ans 69

Navya

gradeup

Mixture

A beaker contains acid and water in the ratio 1 : x. when 350 ml of the mixture and 70 ml of water are mixed ,the ratio of acid and water becomes 5 : 7.what is the value of x?

A 5

B 1

SKIPPED

C 3

D 2

Maulik Pandey

gradeup

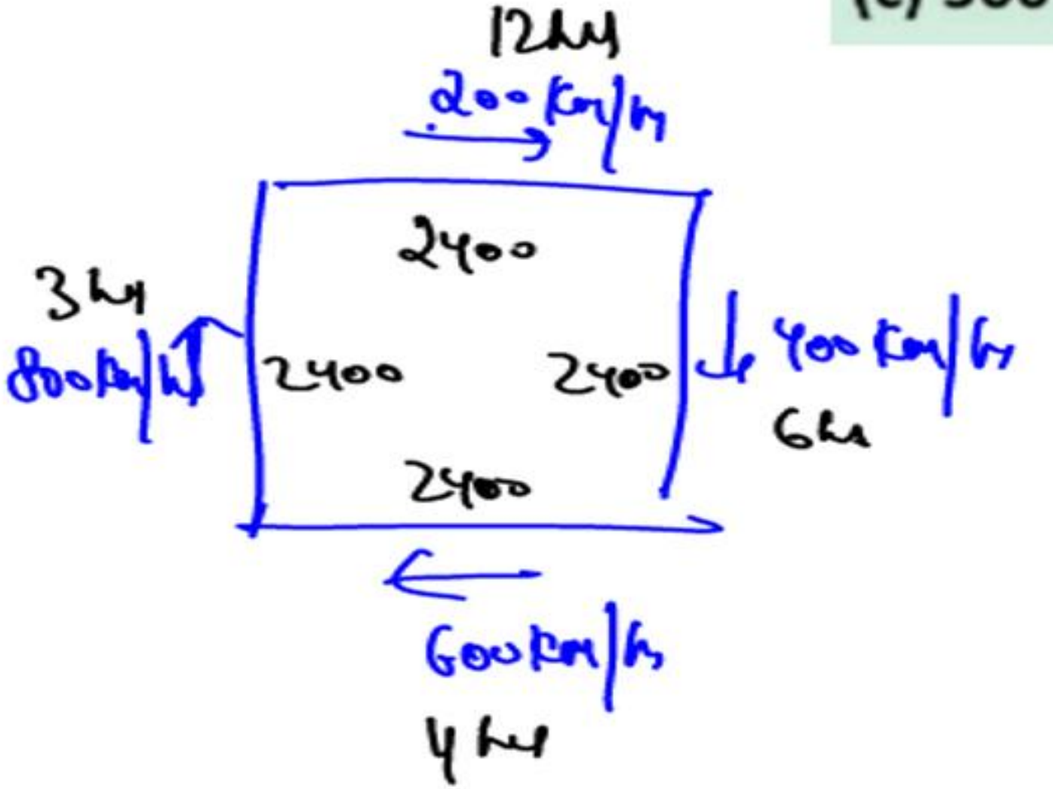
Q20. An aeroplane flies along the four sides of a square field at speeds of 200, 400, 600 and 800 km/hr. The average speed of the plane in the flight around the field in km/hr is :

(a) 384 (b) 400

(c) 500 (d) 284

Let the side of

Square → 2400 km



$$\frac{9600}{25} = 384$$

Maulik Pandey

gradeup

Q10. The average age of 30 students of a class is 14 years 4 months. After admission of 5 new student in the class the average becomes 13 years 9 months. The youngest one of the five new students is 9 years 11 month old. The average age of the remaining 4 new students is

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DOM

Maulik Pandey

gradeup

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(a) 9000
(b) 10000
(c) 15000
(d) 12000

Maulik Pandey

gradeup

Done

Q18. Average marks of 1/4th of the total no. of students is 2/5th of the total marks. Average marks of 1/8th of total no. of students is 4/5th of the total marks. Average marks of 2/5th of the total no. of students got 3/4th of the total marks and average of rest no. of students is 1/5th times of the total marks. If average marks of all students is 327. Find maximum marks of the exam.

(a) 450
(b) 500
(c) 600
(d) 650

SUPRIYA

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Done

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SUPRIYA

gradeup

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(a) 3 : 4
(b) 2 : 3
(c) 5 : 8
(d) 4 : 3

SUPRIYA

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Q Avg score of class A → 83

B → 76

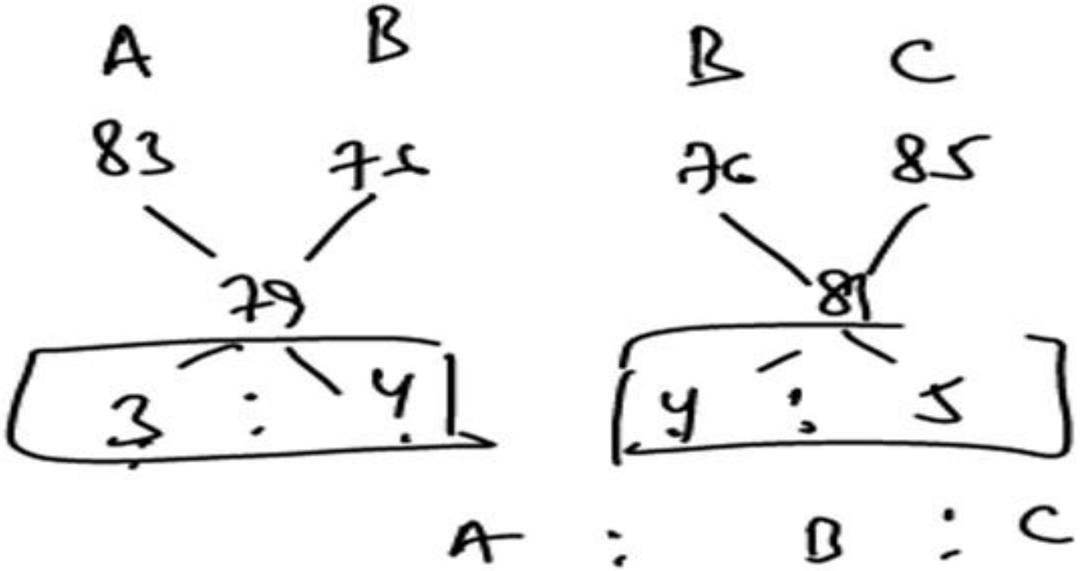
C → 85

Find Avg score A, B & C → ??

A & B → 79

B & C → 81

Ans = 81.5



A : B : C

No. of students: 3 : 4 : 5

Avg: 83 76 85

-28 +10

$\frac{-18}{12} = -1.5$

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Q20. An aeroplane flies along the four sides of a square field at speeds of 200, 400, 600 and 800 km/hr. The average speed of the plane in the flight around the field in km/hr is :

(a) 384
(b) 400
(c) 500
(d) 284

SUPRIYA

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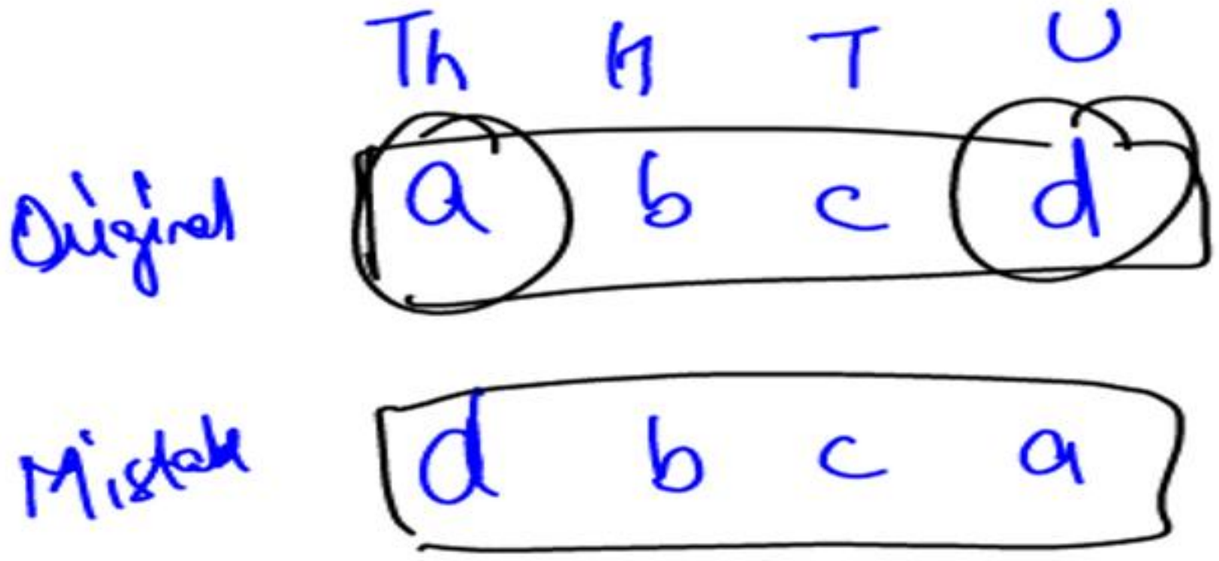
222 four digit number



$(abcd - dbca) = 222 \times 13.5$

$1000a + 100b + 10c + d$

$- (1000d + 100b + 10c + a) = 2997$

$999(a - d) = 2997$

3

A student calculated the average of 222, 'four-digit numbers'. But due to mistake he reversed the corner digits of a number and thus his average decreased by 13.5. The difference between the unit digit and thousands digit of that number is:

$d - a = ??$

A 3

B 2

C -2

D -3

SKIPPED

Rohit

gradeup

Doubts → Gradeup App
(for Any Topic

Better Post → from ongoing Topic
Completed

→ Telegram (9971658659)