

MATHS SPECIAL



PRE + MAINS

LIVE CLASS (ONE TO ONE INTERACTION)

**REGISTRATION
OPEN**

BILINGUAL CONTENT

INCLUDES

- ☐ LIVE Classes
- ☐ Result Oriented Approach
- ☐ PDF Notes
- ☐ Conceptual Clarity

1 YEAR VALIDITY

USEFUL FOR

- ☐ SSC EXAMS
- ☐ BANK EXAMS
- ☐ CSAT
- ☐ STATE GOVT. EXAMS

DOWNLOAD TAIYARI KARO APP TO JOIN THE BATCH



SACHIN BALIYAN SIR

MATHS SYLLABUS



ARITHMETIC:

(SSC/BANK/CUET/CSAT/STATE GOVT)

Time and Work
Pipe and Cistern

Percentage
Profit Loss and Discount
Compound Interest
Simple Interest

Average
Ratio and Proportion
Based of Ages
Partnership
Mixture and Alligation

Time Speed And Distance
Train
Race
Boat and Stream

BANK:

Number Series
Quadratic Equation
Simplification
Approximation

Data Interpretation

Mensuration

Permutation
Combination
Probability

SSC:

Number System
LCM + HCF

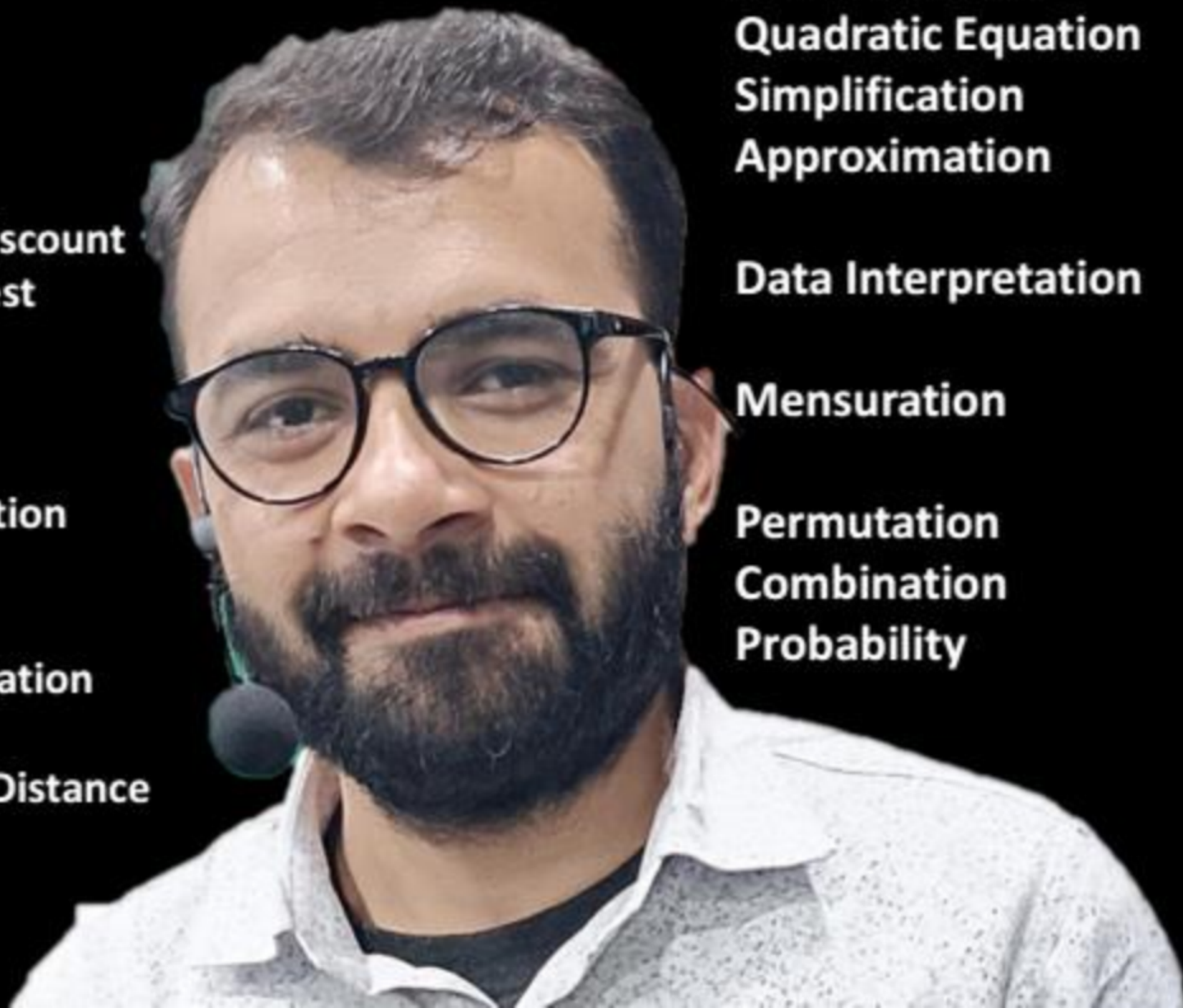
Surds
Indices
Algebra

Trigonometry
Height and Distance

Geometry

Mensuration-2D
Mensuration-3D

Co-ordinate Geometry



Ratio and Proportion

Ratio & Proportion

Basic Question

NO. OF QUESTIONS	CLASS NUMBER	CLASS DURATION
15 Questions	DAY - 1	1 HOURS

Concept

#

$$2A = 3B$$

$$\frac{A}{B} = \frac{3}{2}$$

#

$$2A = 3B = 4C$$

$$\frac{A}{B} \rightarrow \frac{3 \times 2}{2 \times 2} \quad \frac{B}{C} = \frac{4}{3}$$

$$A : B : C \\ 6 : 4 : 3$$

$$2A = 3B = 4C$$

$$\textcircled{A} : B : C = \cancel{12} : \cancel{8} : \cancel{6}$$

$$6 : 4 : 3$$

Trick

$$4:4:2$$

$$\underline{2}A = \overset{1}{4}B = 8C$$

$$A:B:C = \cancel{32}:\cancel{16}:8$$
$$4:2:1$$



If $2x = 3y = 5z$

then find $x : y : z$.

(a) $15 : 10 : 6$ ✓

(b) $20 : 10 : 25$

(c) $25 : 10 : 6$

(d) $30 : 15 : 13$

(e) $36 : 10 : 6$

$$\textcircled{2} A = 3B = 4C$$

↓

$$A : B : C = 12 : 8 : 6$$
$$\Rightarrow \textcircled{6} : 4 : 3$$

$$\textcircled{2} A = 3B$$
$$\frac{A}{B} = \textcircled{3}$$
$$\frac{A}{B} = \textcircled{2}$$

$$\cancel{2A = 3B = 4C}$$

A?

$$\frac{A}{2} = \frac{B}{3} = \frac{C}{4}$$

$$\frac{A:B:C}{2:3:4}$$

Ans

$$\textcircled{2A} = \textcircled{4B} = \textcircled{5C}$$

$$A : B : C = 20 : 10 : 8$$

$$\frac{A}{\textcircled{2}} = \frac{B}{3} = \frac{C}{4}$$

$$A : B : C = 2 : 3 : 4$$



If $\frac{x}{4} = \frac{y}{5} = \frac{z}{6}$

Find $X : Y : Z$

(a) 5:1: 6

(b) 2:5:7

(c) 4:5: 6 ✓

(d) 3:5:1

(e) 6:10:7

$$\frac{2A}{3} = \frac{4B}{5} = \frac{6C}{7}$$

$$A:B:C = \frac{2}{3} : \frac{4}{5} : \frac{6}{7}$$

$$= \frac{2 \times 105}{3} : \frac{4 \times 105}{5} : \frac{6 \times 105}{7}$$

$$= 70 : 84 : 105$$

$$\frac{3x}{4} = \frac{y}{5} = \frac{5z}{6}$$

Find $\frac{3x+y+2z}{2x} = ?$

- (a) 171:40 (b) 141:50
 (c) 4:5 (d) 173:50
 (e) none of these

$$\frac{3x}{4} = \frac{14}{5} = \frac{5z}{6}$$

$$x:y:z = \frac{5 \times 4}{1} : \frac{5 \times 5}{1} : \frac{3 \times 6}{1} = 20 : 25 : 18$$

$$\frac{171}{40} = \frac{60 + 75 + 36}{40}$$

If $x:y:z = \frac{1}{2}:\frac{2}{3}:\frac{5}{6}$
Find $x:y:z$?

- (a) 5:1: 6 (b) 2:5:7
(c) 4:5: 6 (d) 3:4:5
(e) 6:10:7

$x:y = \frac{1}{2}:\frac{2}{3}$ $\times 6$
 $x:y = 3:4$ Ans

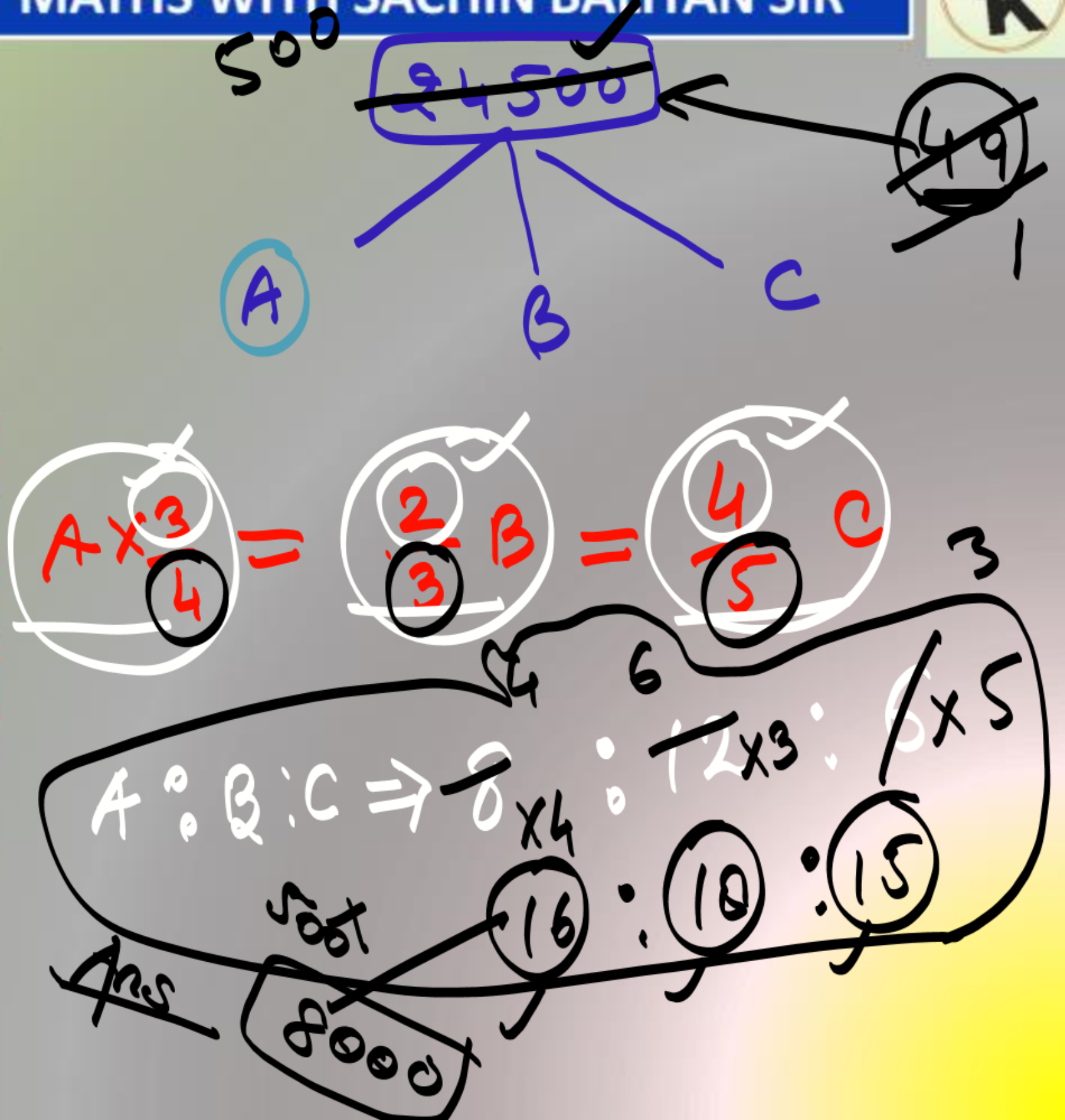
$x:y:z = \frac{1}{2}:\frac{2}{3}:\frac{5}{6}$ $\times 6$
 $x:y:z = 3:4:5$

$3:4:5$

Ans

students in school **A?** डीपीएस के तीन स्कूलों स्कूलों A, B, और C में 24500 छात्र हैं। यदि स्कूल A के तीन-चौथाई, स्कूल B के दो-तिहाई, स्कूल C के $\frac{4}{5}$ वें भाग के छात्रों की संख्या समान है। तो स्कूल A में छात्रों की कुल संख्या ज्ञात कीजिए?

- a) 14400 b) can not determine
c) 8000 d) None of these





Q. X is twice of Y, Y is thrice of Z. Find X: Y: Z? X, Y का दोगुना है, Y, Z का तीन गुना है, X: Y: Z खोजें?

(a) 5:1: 6

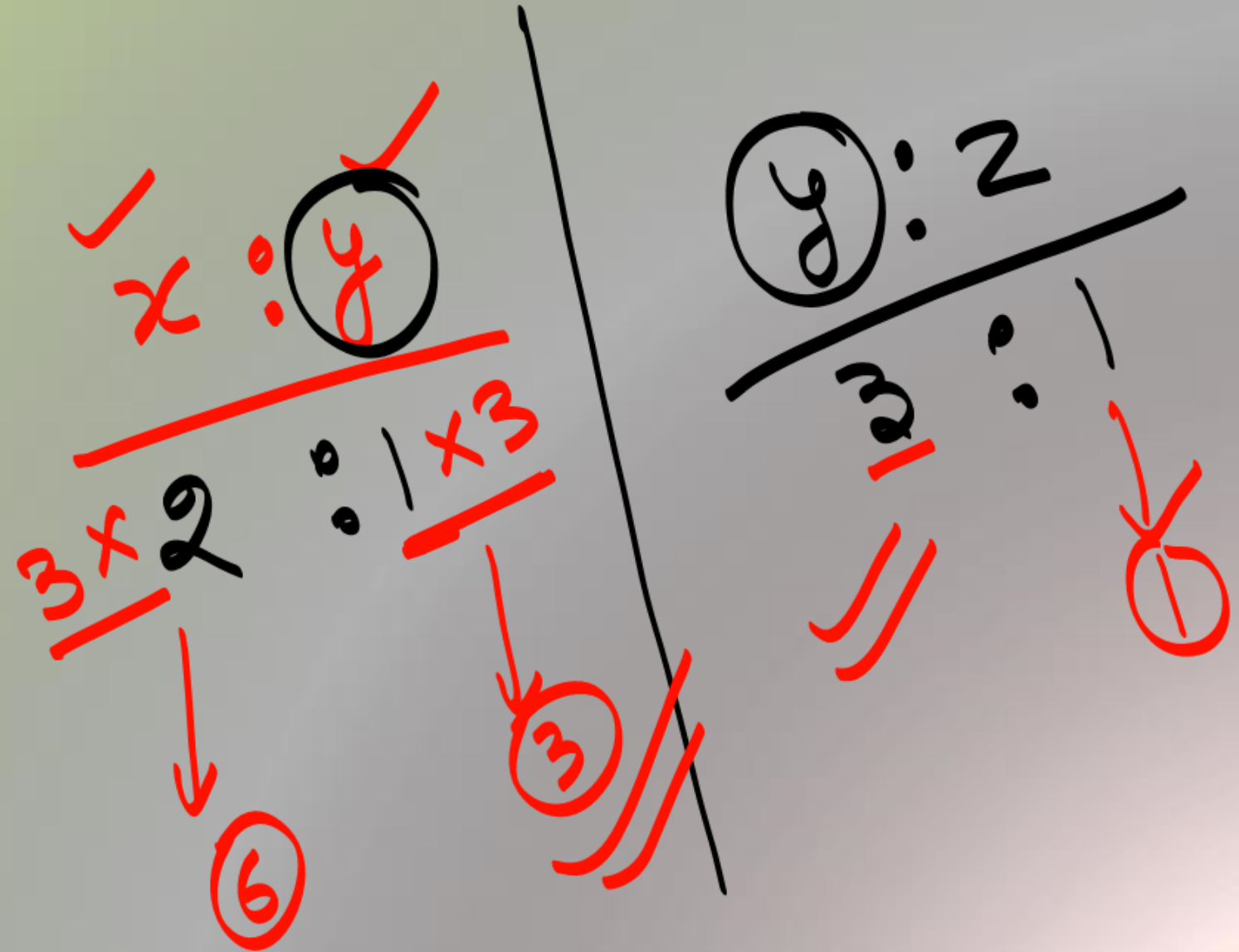
(b) 6:3:1

(c) 4:5: 6

(d) 3:4:5

(e) 6:10:7

6: 3: 1



Handwritten solution showing the ratio $X:Y:Z$ derived from the given conditions:

Condition 1: X is twice of Y, so $X:Y = 2:1$.

Condition 2: Y is thrice of Z, so $Y:Z = 3:1$.

To combine the ratios, Y is 1 in the first ratio and 3 in the second. Multiply the first ratio by 1 and the second by 3 to get $X:Y:Z = 2:1:3$.

Ratio-1 (Basic Question)

MATHS WITH SACHIN BALIYAN SIR



$$x:y = \frac{1}{2} : \frac{1}{3}$$

$$y:z = \frac{2}{3} : \frac{4}{5}$$

Find $x:y:z$?

$$\begin{array}{l} 5 \times \\ 3 : 5 \\ \hline 2 : 4 \end{array}$$

$$\begin{array}{l} 10 : 12 \\ \hline 8 : 2 \end{array}$$

(a) 15:10:12

(b) 16:12:11

(c) 14:15:16

(d) 13:14:15

(e) 16:10:17

$$15:10:12$$

H.W

$$A : B = \frac{2}{3} : \frac{4}{5}$$

$$B : C = \frac{1}{2} : \frac{5}{7}$$

then find

$$\underline{A : B : C = ?}$$

