

Mission

CAT 2021

# DI New Series for CAT 2021 & CMAT

## Calculation Based DI & Graphs

Session 3

AAGR

Inflation

Growth

% Change

Discount Code

**SHAH10**

CAGR



Unacademy\_RonakShah

# Unacademy

## CAT 2021 - New batches on PLUS

**SHAH10**



Target 99

Join any batch using my PLUS Code: **SHAH10**



The banner for the Unacademy Champions League features the Unacademy logo at the top. Below it, the text "Unacademy Champions League" is displayed prominently. A large orange ribbon banner in the center says "WIN Prize Worth\* INR 50,000+". Four categories of prizes are listed below, each with a red checkmark pointing to it:

- RANK 1: INR 10,000 Amazon Voucher & 1 month Subscription
- RANK 2: INR 7,500 Amazon Voucher & 1 month Subscription
- RANK 3: INR 5,000 Amazon Voucher & 1 month Subscription
- RANK 4-10: 1 month subscription

The date "31 January | 5 pm" is displayed at the bottom left, and the unlock code "Unlock Code: SHAH10" is at the bottom right. A small note at the bottom left states "\*Total Worth of rewards is 50k+".

# Ronak Shah

Discuss with me

On Telegram

235711

Quant

# Ronak Shah

MBA (Marketing), BE (E&TC)

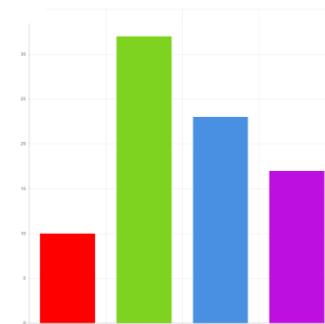


LIVE Daily



Mission

CAT 2021



DI



LR



Interview & College Selection

# Ronak Shah

Discuss with me

On Telegram



@ Unacademy CAT



## Social Media

Join Us on.....



Telegram

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Mission

CAT 2021

LIVE Daily



## AAGR - Average Annual Growth Rate



$$\text{AAGR} = \frac{\text{Sum of growth rates in each year}}{\text{Total Number of Years}}$$



Let's Discuss @



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## CAGR - Compounded Annual Growth Rate

$$\text{CAGR} = \left[ \left( \frac{\text{Final Value}}{\text{Starting Value}} \right)^{\frac{1}{\text{Number of periods}}} - 1 \right] \times 100 \%$$



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# Approximation

10%  
OFF

SHAH10

Take Care of the following Points while Approximating the Values:

- Try to use Increase-Decrease Approach
- Decide the Level of Approximation after taking a Glance at the Answer Options
- Do not waste your time in Approximating the Outliers

~~=====~~

highest Market  
Share.

A

~~B~~

C

D

E

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FREE Sessions using my Code

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and Crack CAT 2021....



YouTube Sessions

Unacademy CAT

DI - Mon to Sat: 6 to 7 PM

QA Basics - Mon to Sat:  
2 to 3 PM



Special Sessions (Free)

App

Unacademy Learning App

Quant for CAT 2021 &  
CMAT

Mon to Sat: 8 to 9 PM

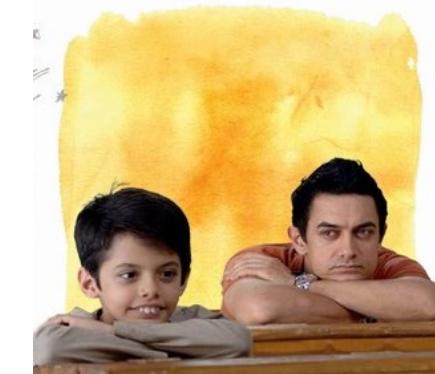
Schedule

PLUS Batches

CAT 2021

Quant - 9 to 10:30 (M - F)

LR-DI - 11:30 to 1 (S, S)



Every CAT Aspirant Needs a  
Nikumbh Sir...



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## ENROLL NOW !

plus



22nd JANUARY

Late Night Weekday  
Batch for CAT 2021

- Hitesh Hariramani
- Dhrubajyoti Banik
- Ritu Dudhoria

plus



25th JANUARY

Exclusive Weekday Evening  
Batch for CAT 2021

- Himanshu Das
- Nilanjan Dutta
- Agnimitra Aman

plus



28th JANUARY

Absolute Weekday Batch  
for CAT 2021

- Ananda Kulkarni
- Bobby Yadav
- Ravi Prakash
- R. P. Singh

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## CAT 2021 - New batches on PLUS

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The banner features a large red checkmark on the left. At the top center is the Unacademy logo. Below it, the text "ICONIC CAT 2021" is displayed in large blue letters. Underneath, the text "Launching on 28th December" is shown in bold black letters. To the right, three young professionals (two men and one woman) are standing behind a blue bar with the Unacademy logo. Below them are the labels "IIM A", "IIM B", and "IIM C". The bottom section of the banner is dark with white text and icons. It shows a smartphone icon with a star, followed by arrows pointing from "Click Question" to "Highlight" to "Send". To the right of this is another smartphone icon with a play button, labeled "Get Solution 24X7". To the right of that is the text "ASK A DOUBT" in large white letters, with the subtitle "Doubt clearing feature is live now !!!" below it.

- Personal mentor
- Test analysis and reports
- OMETs preparation
- All benefits of PLUS included

Get mentored by graduates from top B-schools

IIM A IIM B IIM C

Click Question      Highlight      Send      Get Solution 24X7

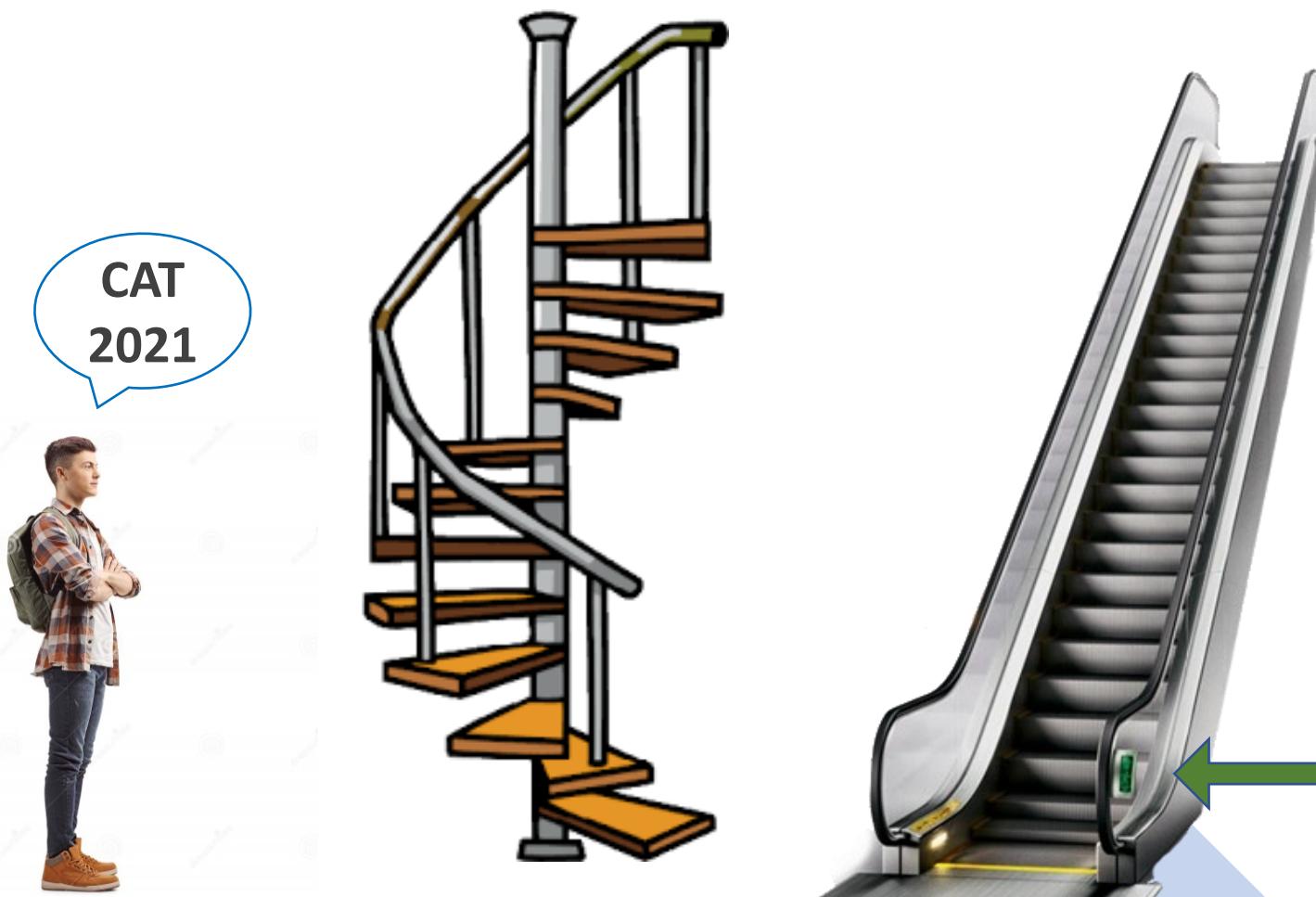
**ASK A DOUBT**  
Doubt clearing feature is live now !!!

**SHAH10**

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## CAT 2021 - New batches on PLUS

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Target 99

PLUS

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Discount Code

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**10% off**

## Unacademy CAT Subscription Plans



Mission

CAT 2021

Join the **PLUS**  
Group

No cost EMI available on 6 months & above subscription plans

|                                  |           |                     |                                       |
|----------------------------------|-----------|---------------------|---------------------------------------|
| <input type="radio"/>            | 1 month   | ₹3,500<br>per month | ₹3,500<br>Total (Incl. of all taxes)  |
| <input type="radio"/>            | 3 months  | ₹2,917<br>per month | ₹8,750<br>Total (Incl. of all taxes)  |
| <input type="radio"/>            | 6 months  | ₹2,333<br>per month | ₹14,000<br>Total (Incl. of all taxes) |
| <input checked="" type="radio"/> | 12 months | ₹1,458<br>per month | ₹17,500<br>Total (Incl. of all taxes) |
| <input type="radio"/>            | 24 months | ₹875<br>per month   | ₹21,000<br>Total (Incl. of all taxes) |



**SHAH10**

Proceed to pay



PRICE NOW

SHAH10

AFTER DISCOUNT

12 MONTHS - ₹ 6,500

SSC

12 MONTHS - ₹ 5,850

12 MONTHS - ₹ 6,500

BANK

12 MONTHS - ₹ 5,850

12 MONTHS - ₹ 5,000

RAILWAY

12 MONTHS - ₹ 4,500

12 MONTHS - ₹ 8,800

MPPSC

12 MONTHS - ₹ 7,920

12 MONTHS - ₹ 7,000

RPSC

12 MONTHS - ₹ 6,300

12 MONTHS - ₹ 10,450

UPPSC

12 MONTHS - ₹ 9,405

12 MONTHS - ₹ 38,500

MPSC

12 MONTHS - ₹ 34,650

12 MONTHS - ₹ 30,250

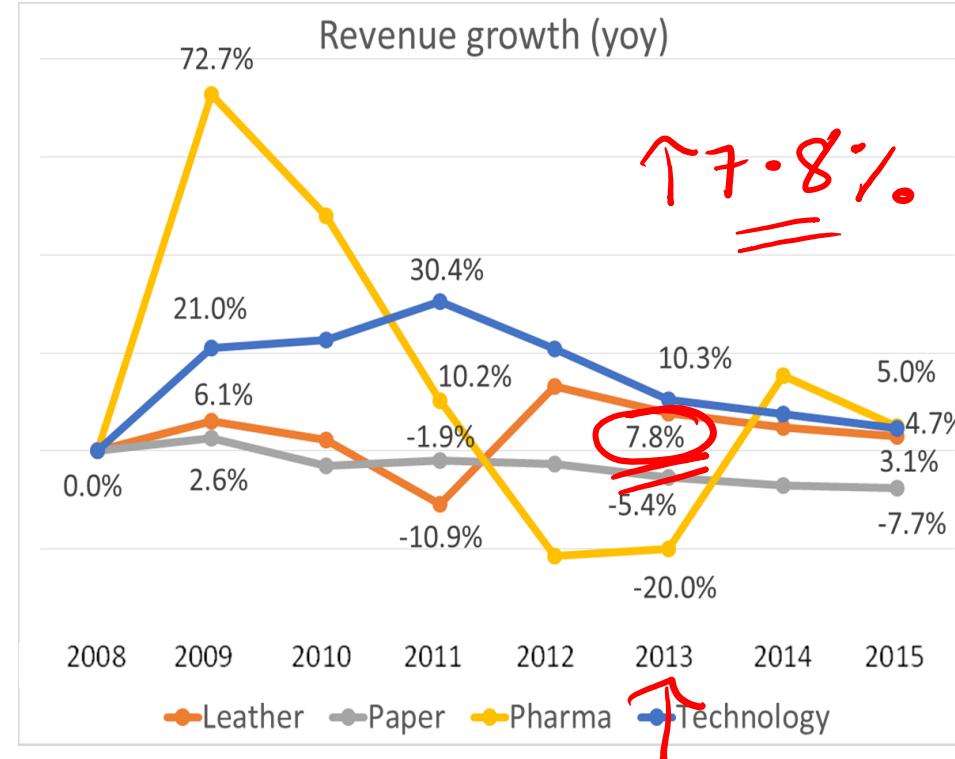
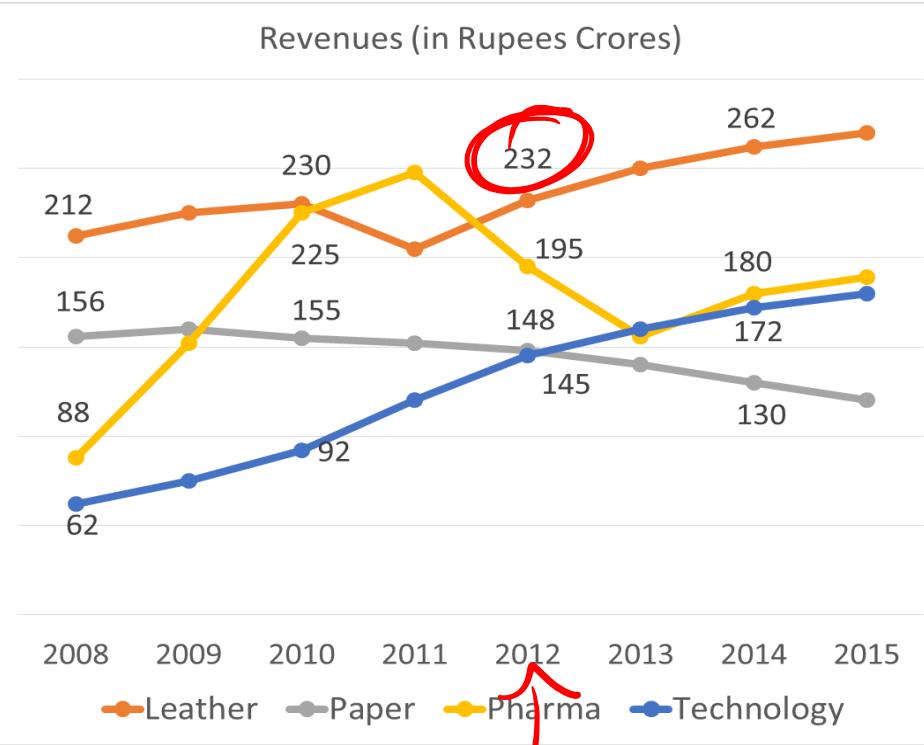
IIT JEE

12 MONTHS - ₹ 27,225

12 MONTHS - ₹ 38,500

GATE & ESE

12 MONTHS - ₹ 34,650



**Directions:**  
The charts show the revenue and YoY growth of 4 divisions (Leather, paper, Pharma, technology) of a company, for the period 2008 to 2015. Revenue Fig for certain years are missing.

Q. 1 of 6

What was the revenue of Leather division in 2013?

- A. Rs. 22 Crores
- B. Rs. 18 Crores
- C. Rs. 15 Crores
- D. Can't be determined

~~250 Cr.~~  
None of these ~~10%~~

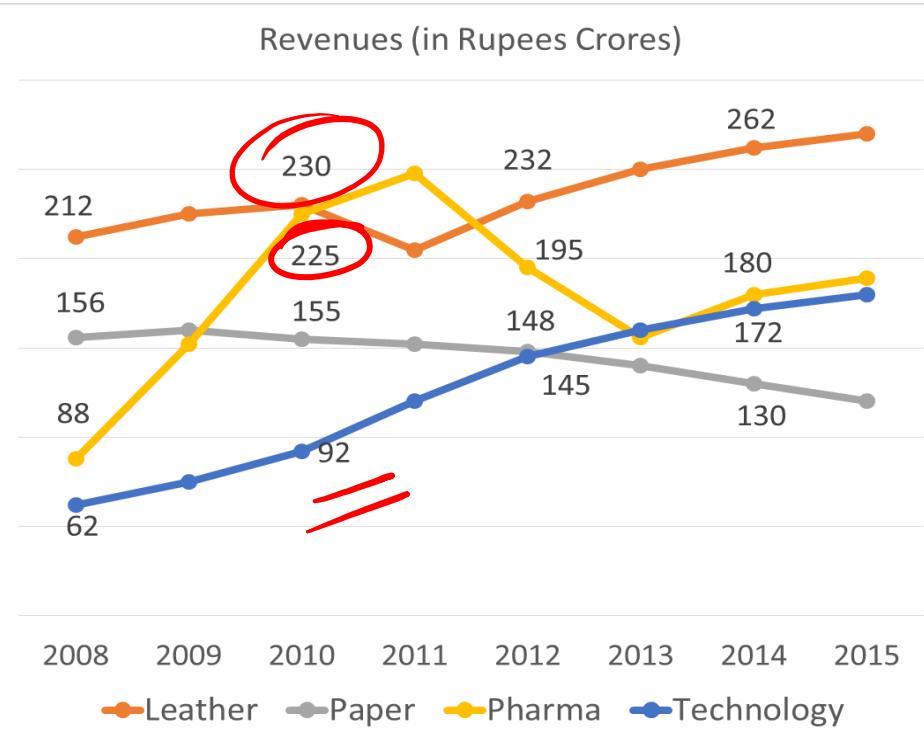
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Let's Discuss @



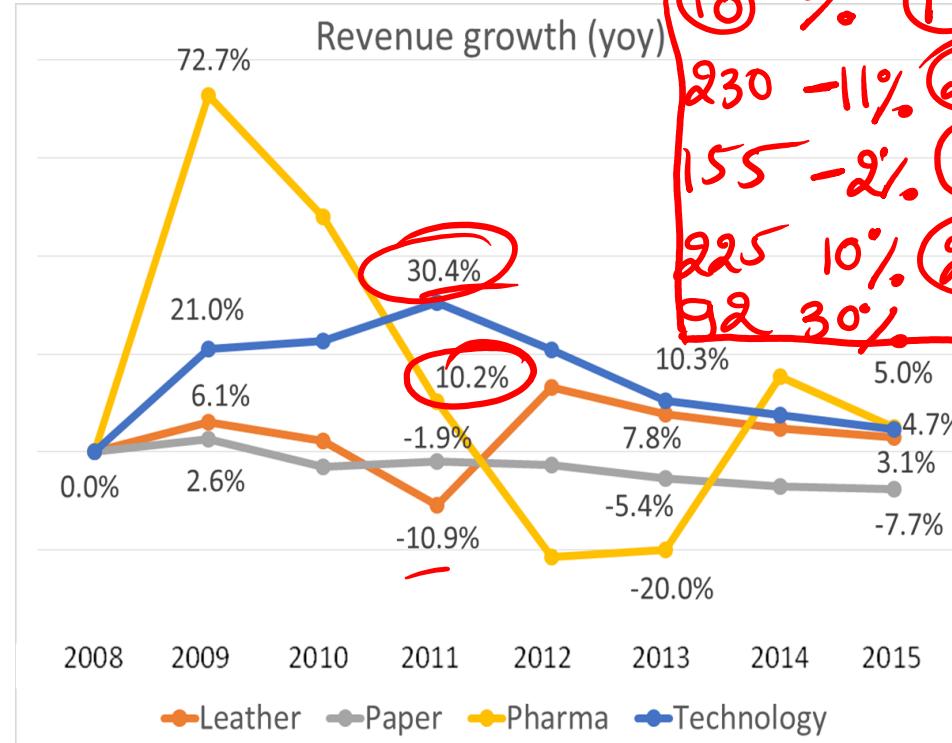
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$$\begin{array}{r}
 \cancel{205} + \cancel{150} + \cancel{250} + \cancel{120} \\
 \hline
 \hline
 = 725
 \end{array}$$

G8.



**Directions:** The charts show the revenue and growth of 4 divisions (Leather, paper, Pharma, technology) of a company, for the period 2008 to 2015. Revenue Fig for certain years are missing.

Q. 2 of 6

What was the total revenues in 2011?

- A. Rs. 640 Crores
- B. Rs. 725 Crores
- C. Rs. 760 Crores
- D. Rs. 680 Crores

10%  
OFF

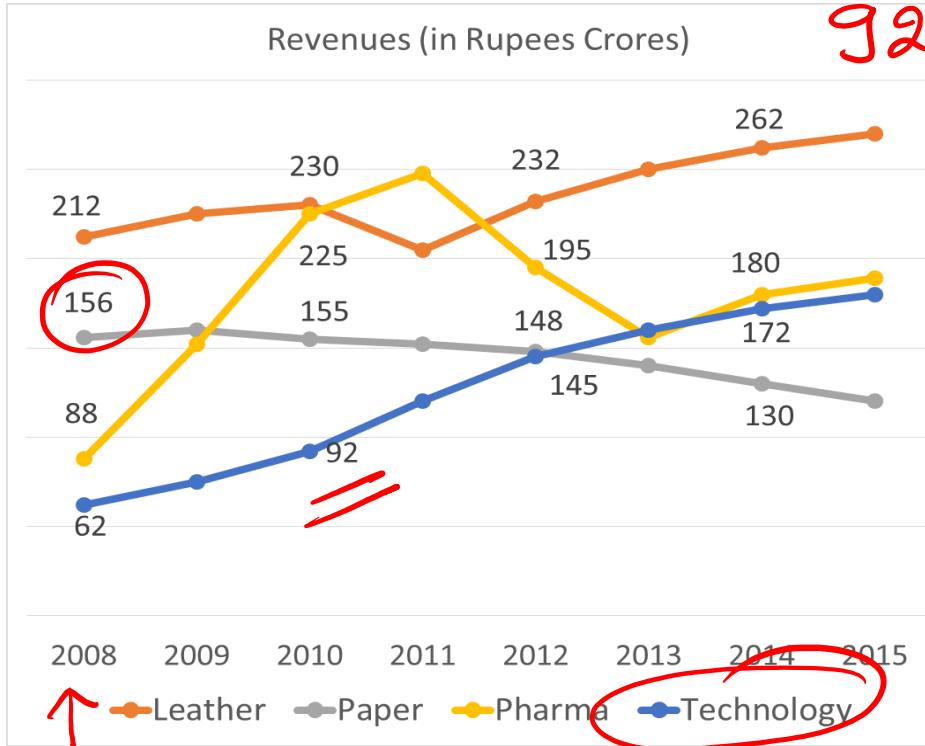
SHAH10

Let's Discuss @

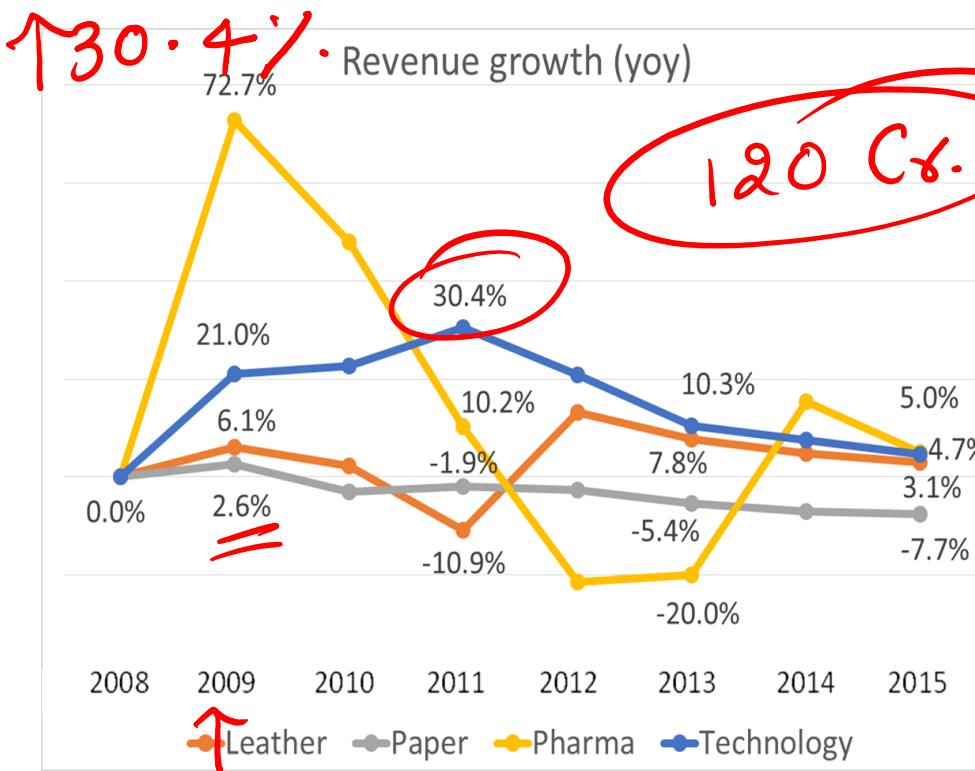


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92



## **Directions:**

The charts show the revenue and YoY growth of 4 divisions (Leather, paper, Pharma, technology) of a company, for the period 2008 to 2015

156

↑2.6%

$$2\% + 0.5\% + 0.1\% \text{ R}$$

$$\begin{array}{r} 3 \cdot 12 \\ + 0 \cdot 78 \\ \hline \end{array}$$

$$= 3.9 + 0.2$$

## Let's Discuss @

Round off your answer to the nearest Integer

33

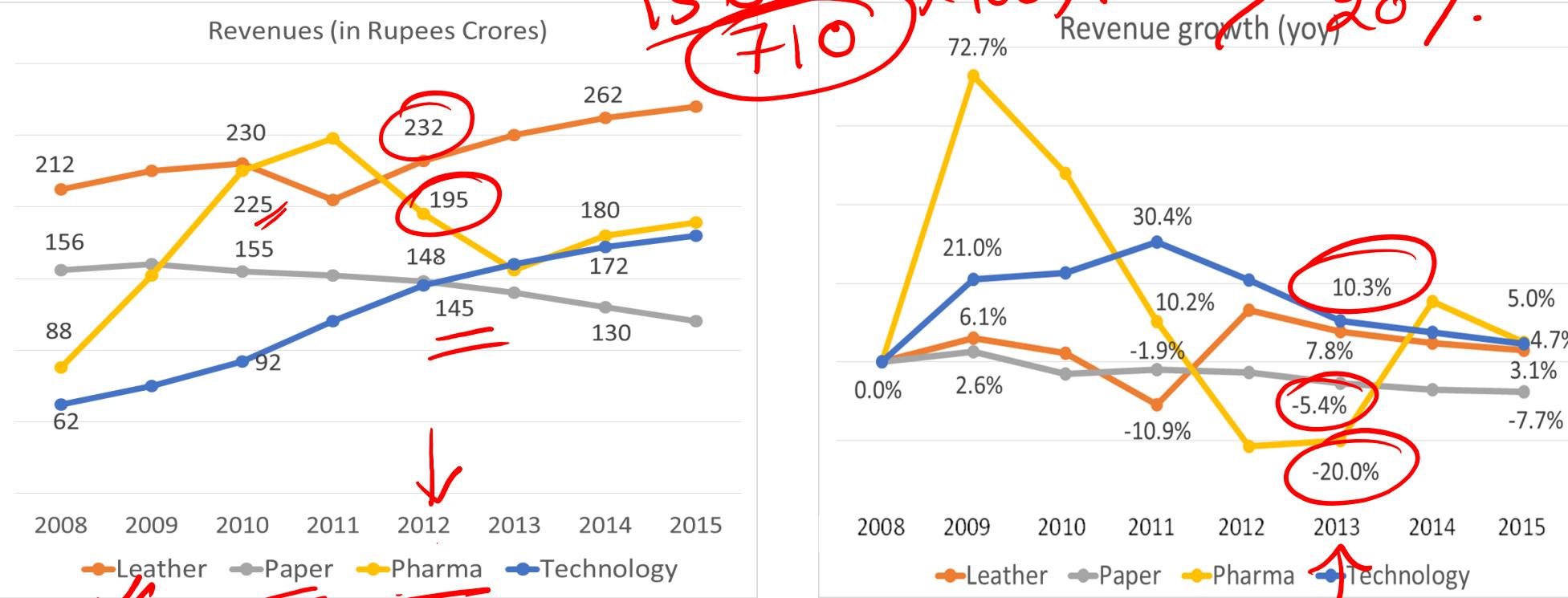
~~Revenue of paper Division in 2009 was what percentage of Technology in 2011?~~

$$\frac{160}{120} = \frac{4}{3} \times 100\%$$



**10%  
OFF**

SHAH10



**Directions:**  
The charts show the revenue and YoY growth of 4 divisions (Leather, paper, Pharma, technology) of a company, for the period 2008 to 2015

L. 232 ↑ 7.8%. 250  
 150 ↓ 5% 148 ↓ 5.4%. 140.  
 195 ↓ 20%. 156.  
 145 ↑ 10.3%. 160.

Q. 4 of 6

In the year 2013, what was the share of revenues of the division Pharma?

- A. 27%
- B. 35%
- C. 19%
- D. 22%

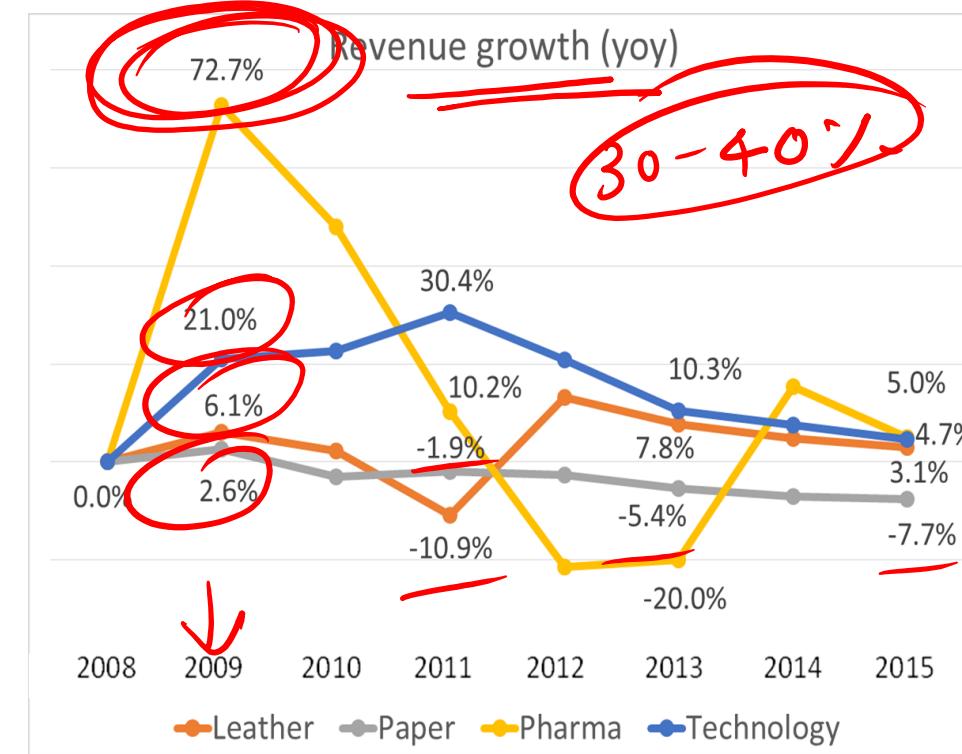
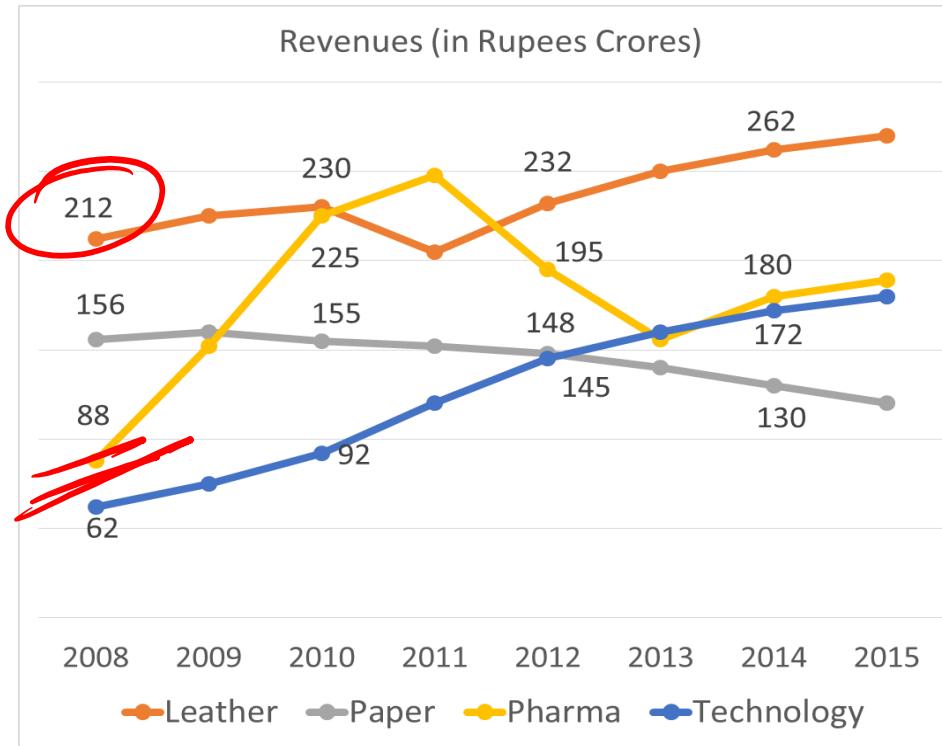
10%  
OFF

Let's Discuss @



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**Directions:**  
The charts show the revenue and YoY growth of 4 divisions (Leather, paper, Pharma, technology) of a company, for the period 2008 to 2015

E  
J.

Q. 5 of 6

Which year saw the highest percentage growth in revenues overall?

- A. 2009
- B. 2010
- C. 2011
- D. 2014

10%  
OFF

Let's Discuss @



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*y*

| Division       | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  |
|----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Leather        | 212.0 | 224.9 | 230.0 | 204.9 | 232.0 | 250.1 | 262.0 | 270.1 |
| Pharma         | 88.0  | 152.0 | 225.0 | 248.0 | 195.0 | 156.0 | 180.0 | 188.5 |
| Paper          | 156.0 | 160.1 | 155.0 | 152.1 | 148.0 | 140.0 | 130.0 | 120.0 |
| Technology     | 62.0  | 75.0  | 92.0  | 120.0 | 145.0 | 159.9 | 172.0 | 180.6 |
| Total          | 518.0 | 612.0 | 702.0 | 724.9 | 720.0 | 706.0 | 744.0 | 759.2 |
| Overall growth | 18%   | 15%   | 3%    | -1%   | -2%   | 5%    | 2%    |       |

*y*

Revenue

12%. 190

Profit

*y*

| Profit Margin | 2014        | 2015 |
|---------------|-------------|------|
| Leather       | 26.2<br>10% | 21.6 |
| Paper         | 15.6<br>12% | 12.  |
| Pharma        | 27<br>15%   | 22.  |
| Technology    | 24%<br>24%  | 51   |

180 ← 28 %  
 54  
 -3.6.  
 50

Q. 6 of 6

The profit margins by division in the years 2014 and 2015 are given in the table above. Find the Year-on-Year (yoY) percentage growth in profits in 2015.

- A. -3%  
 B. -6%  
 C. 2.4%  
 D. 0 % *x*

Total 110 106.6  
 Cr. -3%



Time

| 2014 Profits |          |               |         |
|--------------|----------|---------------|---------|
| Division     | Revenues | Profit Margin | Profits |
| Leather      | 262.0    | 10%           | 26.2    |
| Pharma       | 180.0    | 15%           | 27.0    |
| Paper        | 130.0    | 12%           | 15.6    |
| Technology   | 172.0    | 24%           | 41.3    |
| Total        | 744.0    | 110.1         |         |

| 2015 Profits |          |               |         |
|--------------|----------|---------------|---------|
| Division     | Revenues | Profit Margin | Profits |
| Leather      | 270.1    | 8%            | 21.6    |
| Pharma       | 188.5    | 12%           | 22.6    |
| Paper        | 120.0    | 10%           | 12.0    |
| Technology   | 180.6    | 28%           | 50.6    |
| Total        | 759.2    | 106.8         |         |

Q. 6 of 6

The profit margins by division in the years 2014 and 2015 are given in the table above. Find the Year-on-Year (oyy) percentage growth in profits in 2015.

- A. -3%
- B. -6%
- C. 2.4%
- D. 0 %

10%  
OFF



Let's Discuss @



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Unlock

FREE Sessions using my Code

SHAH10

and Crack CAT 2021....



YouTube Sessions

Unacademy CAT

DI - Mon to Sat: 6 to 7 PM

QA Basics - Mon to Sat:  
2 to 3 PM



Special Sessions (Free)

Unacademy Learning App

Quant for CAT 2021 &  
CMAT

Mon to Sat: 8 to 9 PM

Schedule

PLUS Batches

CAT 2021



Quant – 9 to 10:30 (M – F)

LR-DI – 11:30 to 1 (S, S)



Every CAT Aspirant Needs a  
Nikumbh Sir...



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## Let's Crack Aptitude!

### Vedic Maths & Caltech

- Faster Calculations
- Shortcuts for Squares & Multiplications
- Digital Sum

### Fraction Decimal Surds Indices Log

- Decimals & Fractions
- Surds and Indices
- Logarithm

### Factors HCF LCM Divisibility

- Divisibility HCF
- LCM
- Prime Composite
- Basic Number Properties

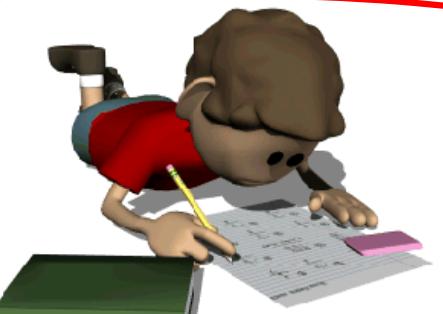
### Arithmetic Basics

- Shortcuts for Percentage Calculations
- Profit Loss SI CI
- Ratio Proportions
- Averages
- Time work
- Time speed distance

### Geometry and Algebra Basics

- Understanding Algebra
- Solving Linear & Quadratic Equations
- Word Problems
- Ages Questions
- Lines and Angles
- Triangle Basics
- Quadrilaterals
- Mensuration

Everyday @ 2 PM



Q. 1 of 3

✓

What was the percentage of students who cleared CAT in 2000?

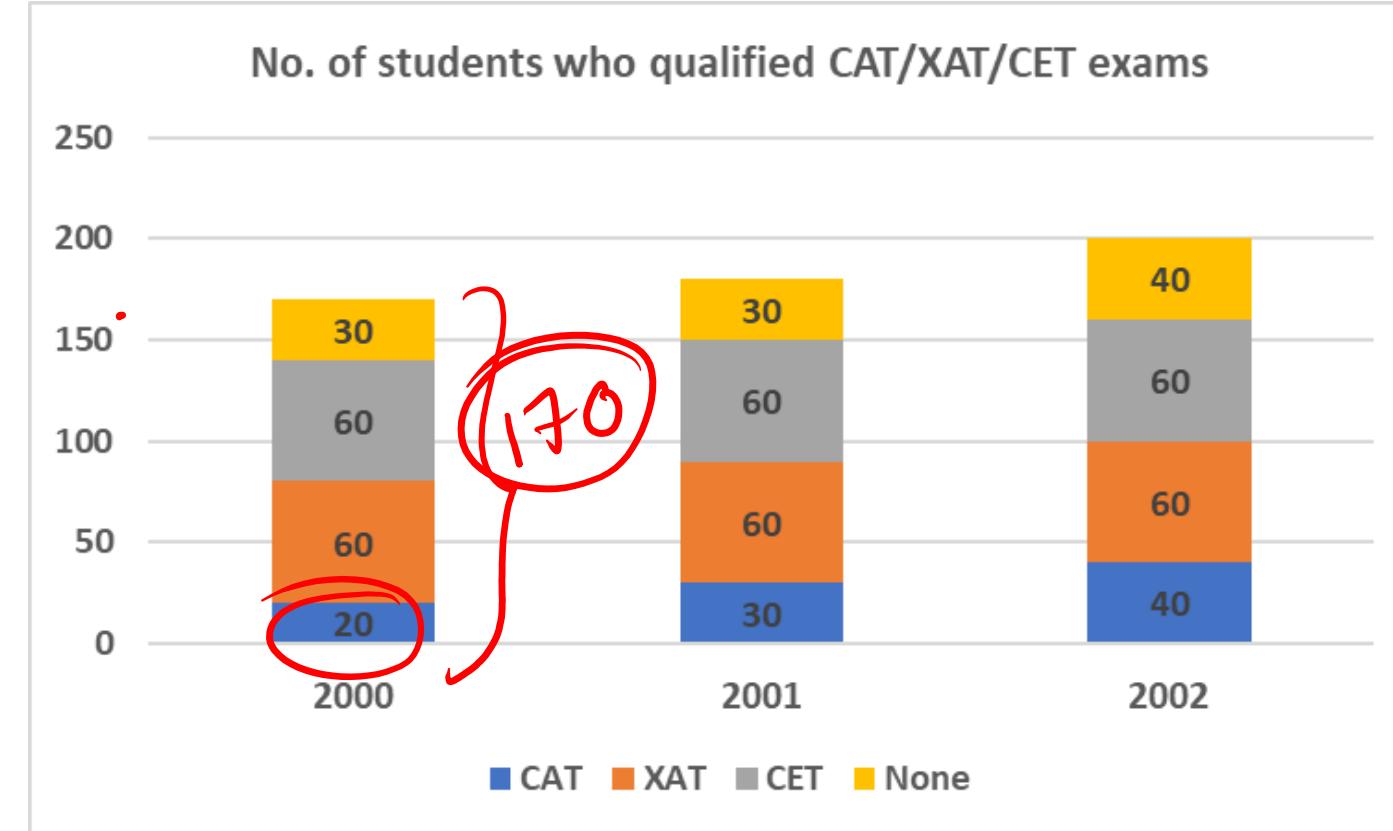
- A. 19.56%
- B. 12.65%
- C. 14.28%
- D. 11.76%

✓.

170 → 20.  
↓ 10%.  
↓ 17.

E

The following chart represents the number of students of **Catalyst Institute**, at its Pune center, who passed either the CAT exam or XAT exam or CET exam or none of these exams. (Assume that there are no students who passed more than one exam and the students appeared for only these exams)



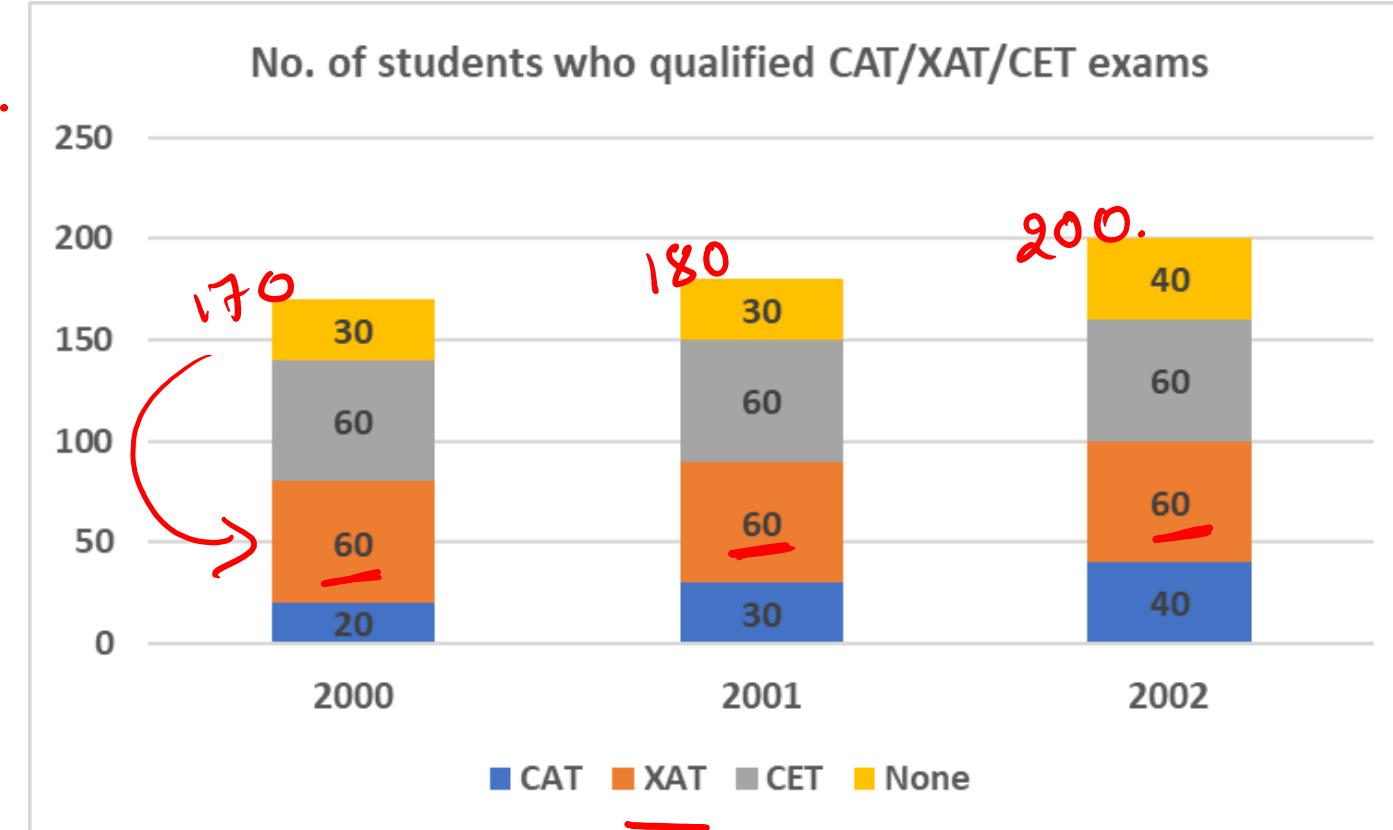
Q. 2 of 3

In which year, the % of students qualifying XAT the highest, in the institute?

- A. 2000 ✓
- B. 2001
- C. 2002
- D. Can't be determined

E.

The following chart represents the number of students of **Catalyst Institute**, at its Pune center, who passed either the CAT exam or XAT exam or CET exam or none of these exams. (Assume that there are no students who passed more than one exam and the students appeared for only these exams)



Q. 3 of 3

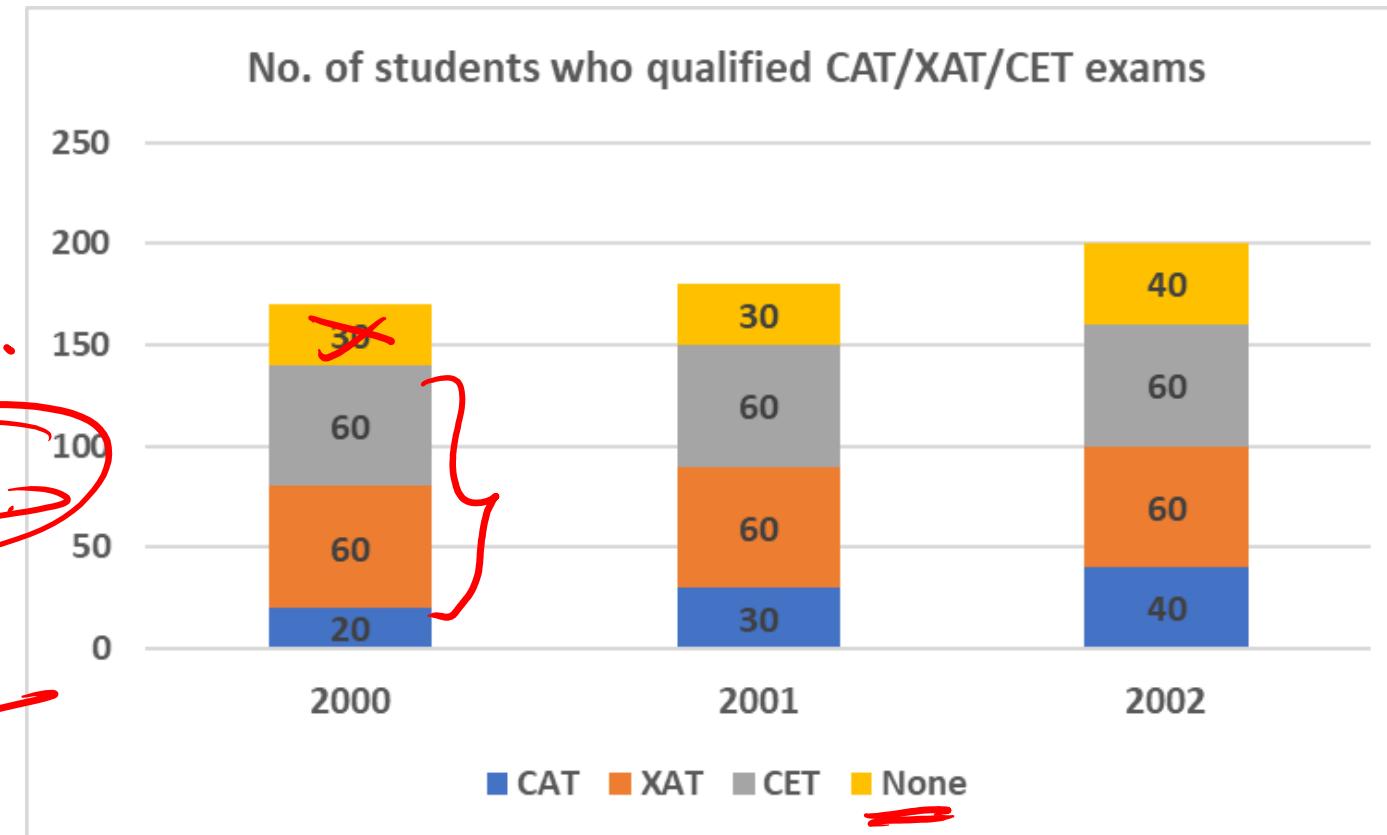
What was the percentage of students who succeeded in at least one of the three exams in 2000?

- A. 82.45%
- B. 82.8%
- C. 82.35% ✓
- D. 83.3%

$$\frac{149}{170} \times 100\% = 82.35\%$$

170  
1400  
136  
40  
34  
60

The following chart represents the number of students of **Catalyst Institute**, at its Pune center, who passed either the CAT exam or XAT exam or CET exam or none of these exams. (Assume that there are no students who passed more than one exam and the students appeared for only these exams)



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**SHAH10**



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unacademy

# ICONIC CAT 2021

Launched on 28th December

- Personal mentor
- Test analysis and reports
- OMETs preparation
- All benefits of PLUS included

Get mentored by graduates from top B-schools

IIM A IIM B IIM C

Click Question      Highlight      Send      Get Solution 24X7

## ASK A DOUBT

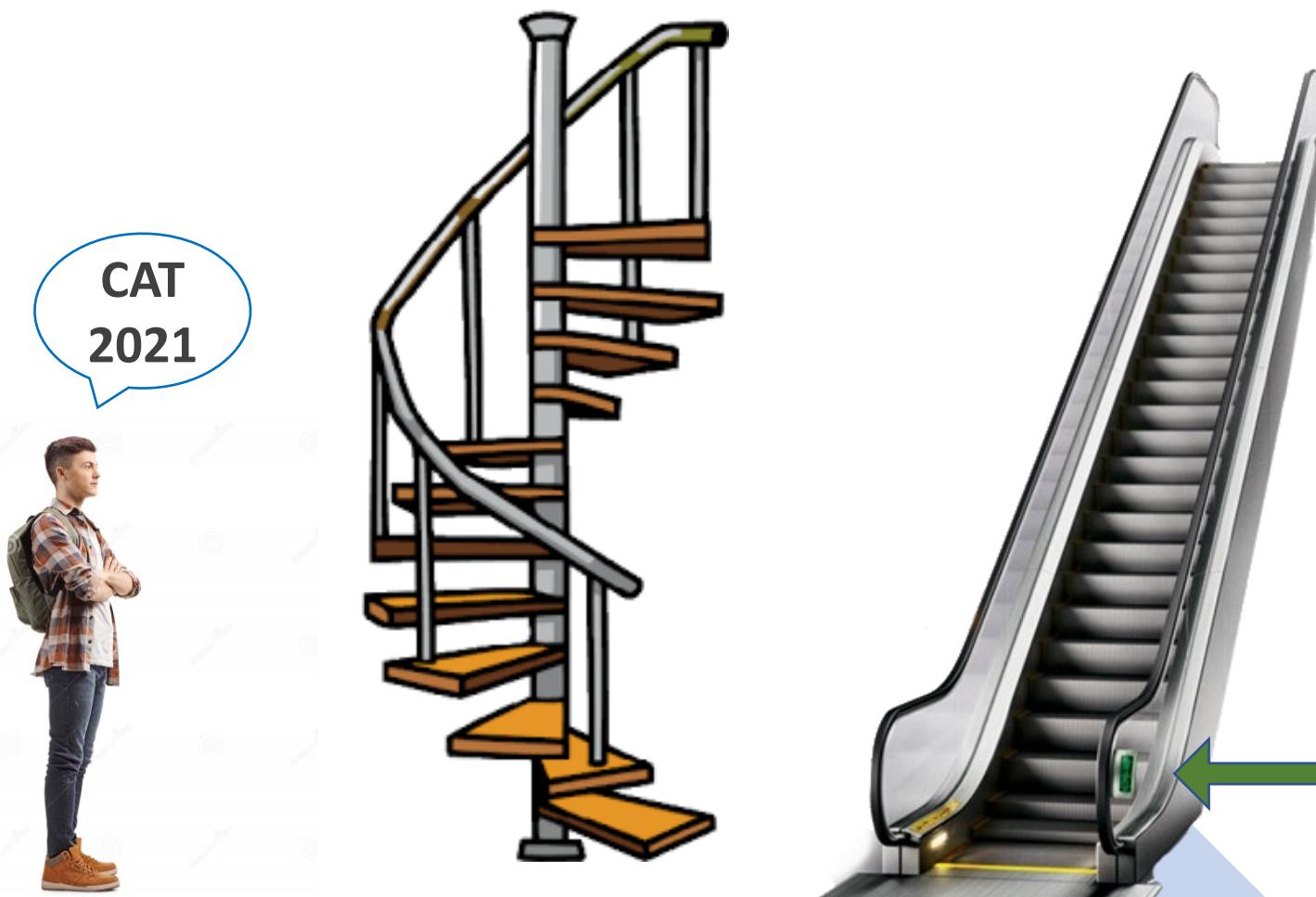
Doubt clearing feature is live now !!!

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## CAT 2021 - New batches on PLUS

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PLUS

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Join the **PLUS**  
Group

No cost EMI available on 6 months & above subscription plans

|  |                     |                                       |
|--|---------------------|---------------------------------------|
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| <input type="radio"/> 3 months             | ₹2,917<br>per month | ₹8,750<br>Total (Incl. of all taxes)  |
| <input type="radio"/> 6 months             | ₹2,333<br>per month | ₹14,000<br>Total (Incl. of all taxes) |
| <input checked="" type="radio"/> 12 months | ₹1,458<br>per month | ₹17,500<br>Total (Incl. of all taxes) |
| <input type="radio"/> 24 months            | ₹875<br>per month   | ₹21,000<br>Total (Incl. of all taxes) |

**SHAH10** **Proceed to pay**



PRICE NOW

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AFTER DISCOUNT

12 MONTHS - ₹ 6,500

SSC

12 MONTHS - ₹ 5,850

12 MONTHS - ₹ 6,500

BANK

12 MONTHS - ₹ 5,850

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RAILWAY

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IIT JEE

12 MONTHS - ₹ 27,225

12 MONTHS - ₹ 38,500

GATE & ESE

12 MONTHS - ₹ 34,650



Access All my Free Session Videos...

10%  
OFF

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Tinyurl.com/Ronak-Shah-Special-Classes



Tinyurl.com/Ronak-Sir



Get Discount

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ON PLUS



Mission

Quant

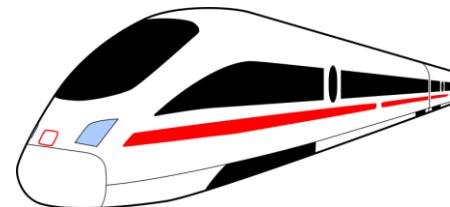
# Quant New batch

for

*Mixtures  
& Alligations*  
~~CAT 2021~~ & CMAT

Complete Arithmetic

8 PM on App (Free)



Discount Code

**SHAH10**

Weightage In  
CAT

**12 Marks**

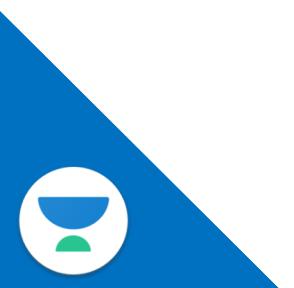


# Keep Learning...!!

10%  
OFF

SHAH10

thank you



Let's Discuss @



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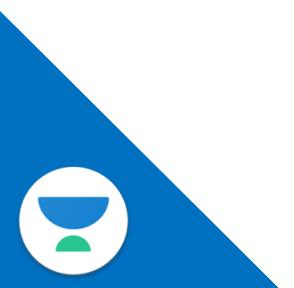


# Keep Learning...!!

10%  
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SHAH10

thank you



Let's Discuss @



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