

GATE

CRASH COURSE

ALL Branches

Subject

General Aptitude

Lec : 11

Data Interpretation

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Topics *to be covered*



1 DATA INTERPRETATION ✓





DATA INTERPRETATION



Graph

1. Tabular
2. line graph
3. Bar graph
4. Pie chart

Question



Study the following table carefully and answer the questions that follows:

<u>Year</u>	<u>Heavy</u>	<u>Light Commercial Vehicles</u>	<u>Cars</u>	<u>Jeeps</u>	<u>Two-Wheelers</u>
1990	26	64	232	153	340
1991	45	60	242	172	336
1992	72	79	248	210	404
1993	81	93	280	241	411
1994	107	112	266	235	442
Total	331	408	1268	1011	1933

Question



S.P.V
C.P

The percentage increase in the sales in 1993 over the previous year was maximum for which of the following categories of vehicles?

Heavy $\rightarrow \frac{81}{72} = 1.125$

L.C.V $\rightarrow \frac{93}{79} = 1.177$ (17.7%)

Cars $\rightarrow \frac{280}{248} = 1.1290$

Jeep $\rightarrow \frac{241}{210} = 1.147$

A

Cars

C

Heavy vehicles

B

Jeep

D

Light commercial vehicles

Year	Heavy	Light Commercial Vehicles	Cars	Jeeps	Two-Wheelers
Year	Heavy	L.C.V.	Cars	Jeeps	2 wheelers
1990	26	64	232	153	340
1991	45	60	242	172	336
1992	72	79	248	210	404
1993	81	93	280	241	411
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Total	331	408	1268	1011	1933

Question



In which year was the number of 2-wheelers sold as a percentage of the total number of vehicles sold during that year, the highest?

A 1994

$$41.71\% = \frac{34800}{815}$$

B 1990

$$39.29\% = \frac{33680}{855}$$

C 1992

$$39.88\% = \frac{40480}{1013}$$

D 1991

$$38.03\% = \frac{44200}{1162}$$

Year	Heavy	Light Commercial Vehicles	Cars	Jeeps	Two-Wheelers
Year	Heavy	L.C.V.	Cars	Jeeps	2 wheelers
1990	26	64	232	153	340
1991	45	60	242	172	336
1992	72	79	248	210	404
1993	81	93	280	241	411
1994	107	112	266	235	442
Total	331	408	1268	1011	1933

Total

815

855

1013

1106

1162

Question



The number of Heavy Vehicles sold in 1993 was approximately what percent of the total number of vehicles sold in 1992?

$$\frac{8100}{1013} = 7.99\%$$

Year	Heavy Vehicles	Light Commercial Vehicles	Cars	Jeeps	Two-Wheelers
1990	26	64	232	153	340
1991	45	60	242	172	336
1992	72	79	248	210	404
1993	81	93	280	241	411
1994	107	112	266	235	442
Total	331	408	1268	1011	1933

A 8

B 10

C 7

D 9

7.32%

Question



Study the following railway time-table of Geetanjali Express and answer the questions:

City	Arrival Time (hrs)	Departure Time (hrs)	Cumulative Mileage
BOMBAY	---	0900	0
IGATPURI	1100	1102	80
NASIK	1450	1455	281
BHUSAWAL	1710	1712	391
AKOLA	2240	2245	730
NAGPUR	0005	0015	800
DURG	0100	0102	845
JAMSHEDPUR	0415	0428	995
CALCUTTA	0625	---	1100

Question

$$\frac{\text{Total Distance}}{\text{Total Time}} = \frac{1100}{21} = 52.38 \text{ mph}$$



The average speed that the train maintained between Bombay and Calcutta was nearly equal to?

- A** 42 miles/h **B** 61 miles/h
- C** 52 miles/h **D** 74 miles/h

City	Arrival Time (hrs)	Departure Time (hrs)	Cumulative Mileage
BOMBAY	---	0900	0
IGATPURI	1100	1102	80
NASIK	1450	1455	281
BHUSAWAL	1710	1712	391
AKOLA	2240	2245	730
NAGPUR	0005	0015	800
DURG	0100	0102	845
JAMSHEDPUR	0415	0428	995
CALCUTTA	0625	---	1100

Question



The largest run for the train between two successive halts is?

- A** Jamshedpur-kolkata
- B** Bombay-Kolkata
- C** Bhusawal-Akola
- D** Akola-Nagpur

City	Arrival Time (hrs)	Departure Time (hrs)	Cumulative Mileage
BOMBAY	---	0900	0
IGATPURI	1100	1102	80
NASIK	1450	1455	281
BHUSAWAL	1710	1712	391
AKOLA	2240	2245	730
NAGPUR	0005	0015	800
DURG	0100	0102	845
JAMSHEDPUR	0415	0428	995
KOLKATA	0625	---	1100

80
201
110
340
70
245
150
105

Question



$$21.5 + 8 + 21.5 = \underline{\underline{51 \text{ hrs}}}$$

The train begins its journey from Calcutta to Bombay eight hours after it has arrived Calcutta. If the train left Bombay on Monday, on what day will it have returned to Bombay? (Assume that on the return journey the train maintains the same average speed as on onward journey)

A Monday

B Wednesday

C Tuesday

D None of these



City	Arrival Time (hrs)	Departure Time (hrs)	Cumulative Mileage
BOMBAY	---	0900	0
IGATPURI	1100	1102	80
NASIK	1450	1455	281
BHUSAWAL	1710	1712	391
AKOLA	2240	2245	730
NAGPUR	0005	0015	800
DURG	0100	0102	845
JAMSHEDPUR	0415	0428	995
CALCUTTA	0625	---	1100

Question



Based on the given pie-chart, which shows the expenditure incurred by a family in January, 2024 over different head, what is the percentage of expenditure incurred on rent with respect to expenditure on fuel?

A 64.2%

C 167.5%

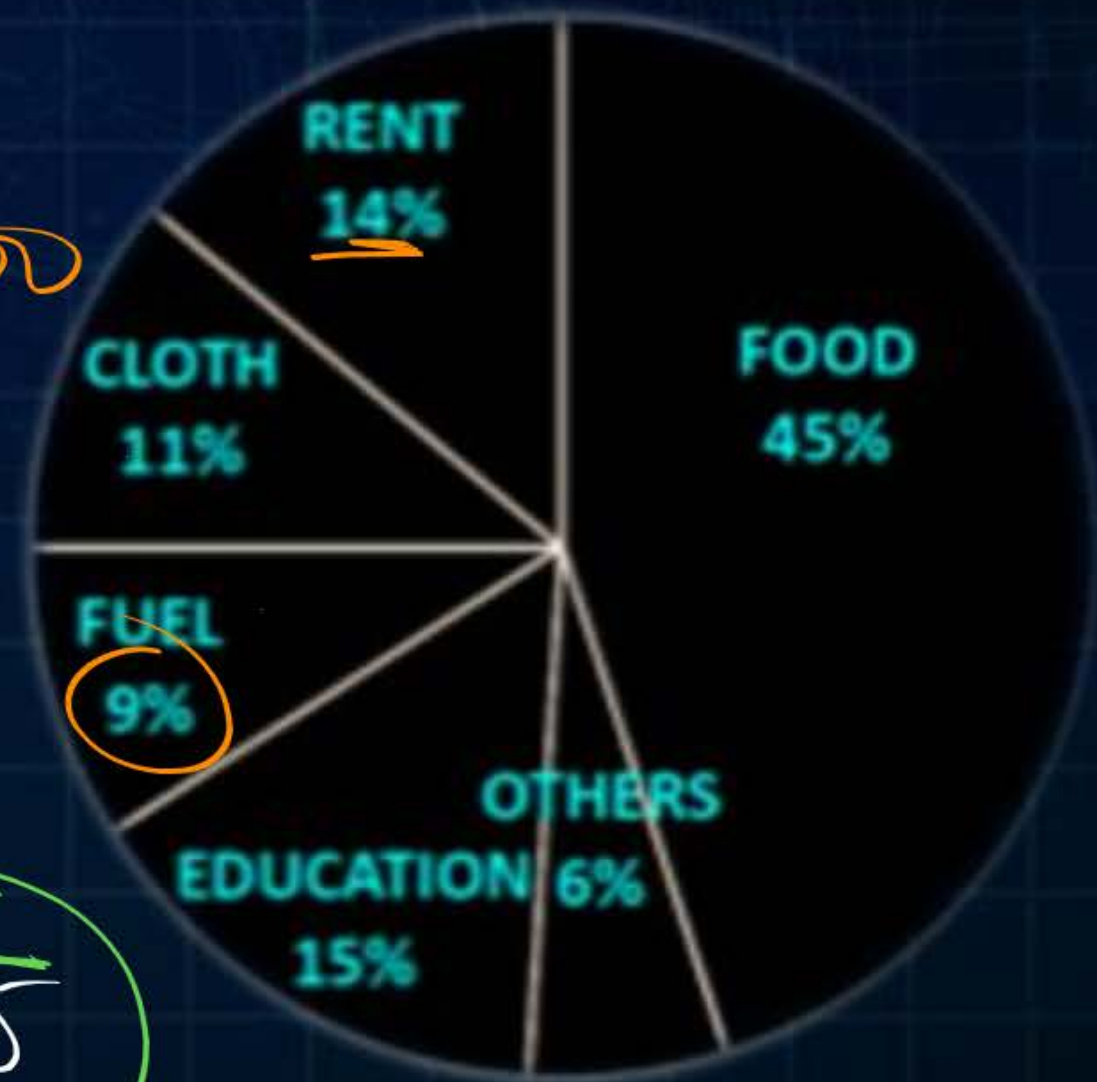
B 23%

D 155.5%

$$\frac{14\cancel{x}}{9\cancel{x}} \times 100$$

$$\frac{1400}{9}$$

$$= 155.5$$



Question

The production of goods in a warehouse over a 9-month period is shown in the graph. What is the average growth (in tons per month) during this period?

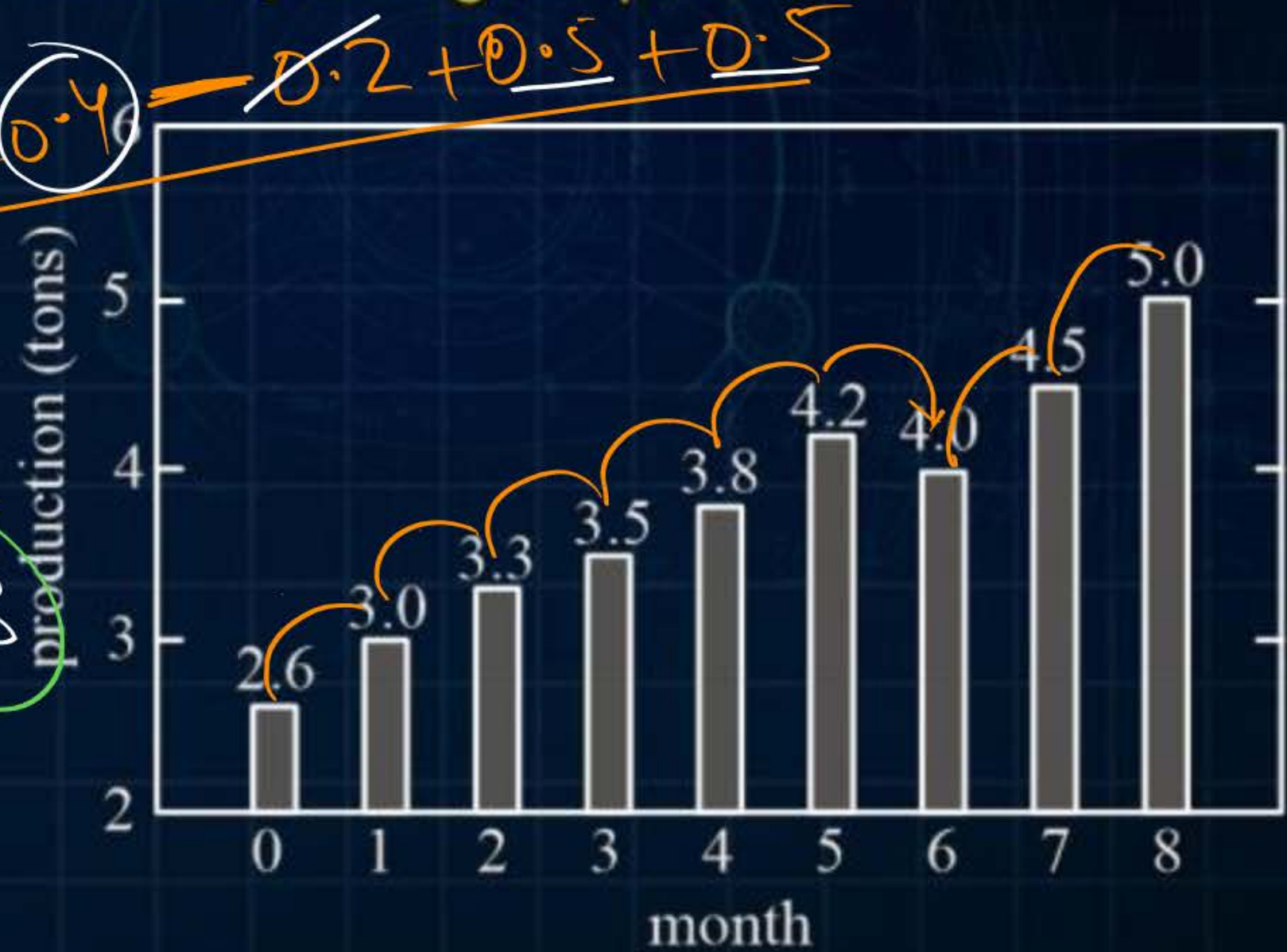
A is 0.3

B is 0.5

C is 0.66

D None of these

$$\frac{2.4}{8} = 0.3$$



Question (PYQ GATE Exam 2022 CE)



The frequency chart shows the frequency distribution of marks obtained by a set of students in an exam.

From the data presented, which one of the following is CORRECT?

3, 3, 3, 4, 4, 4, 4, 4, 4, 4

A mean > mode > median

B mode > median > mean

C mode > mean > median

D median > mode > mean



Median

$$\frac{25^{\text{th}} + 26^{\text{th}}}{2}$$

$$\frac{6+6}{2} = 6$$

Mode = 7

Mark	f ⁽ⁿ⁾	
3	3✓	9
4	9✓	36
5	11✓	55
6	7✓	42
7	14	98
8	2	16
9	4	36
SD		$\Sigma = 292$

Mean

$$= \frac{292}{50}$$

$$= 5.84$$

Mode > Median > Mean

Question (PYQ GATE Exam 2020 CS)



The total revenue of a company during 2014-2018 is shown in the bar graph. If the total expenditure of the company in each year is 500 million rupees, then the aggregate profit or loss (in percentage) on the total expenditure of the company during 2014-2018 is ___

$$\frac{S.P}{C.P} = \frac{\text{Total Revenue}}{\text{Total Expenditure}} = \frac{3000}{2500}$$

20% $\rightarrow \frac{6}{5} = 1.2$

20% P

- A** 16.67% profit
- B** 16.67% loss
- C** 20% profit
- D** 20% loss



Question (PYQ GATE Exam 2020 CE)



The total expenditure of a family, on different activities in a month, is shown in the pie-chart. The extra money spent on education as compared to transport (in percent) is

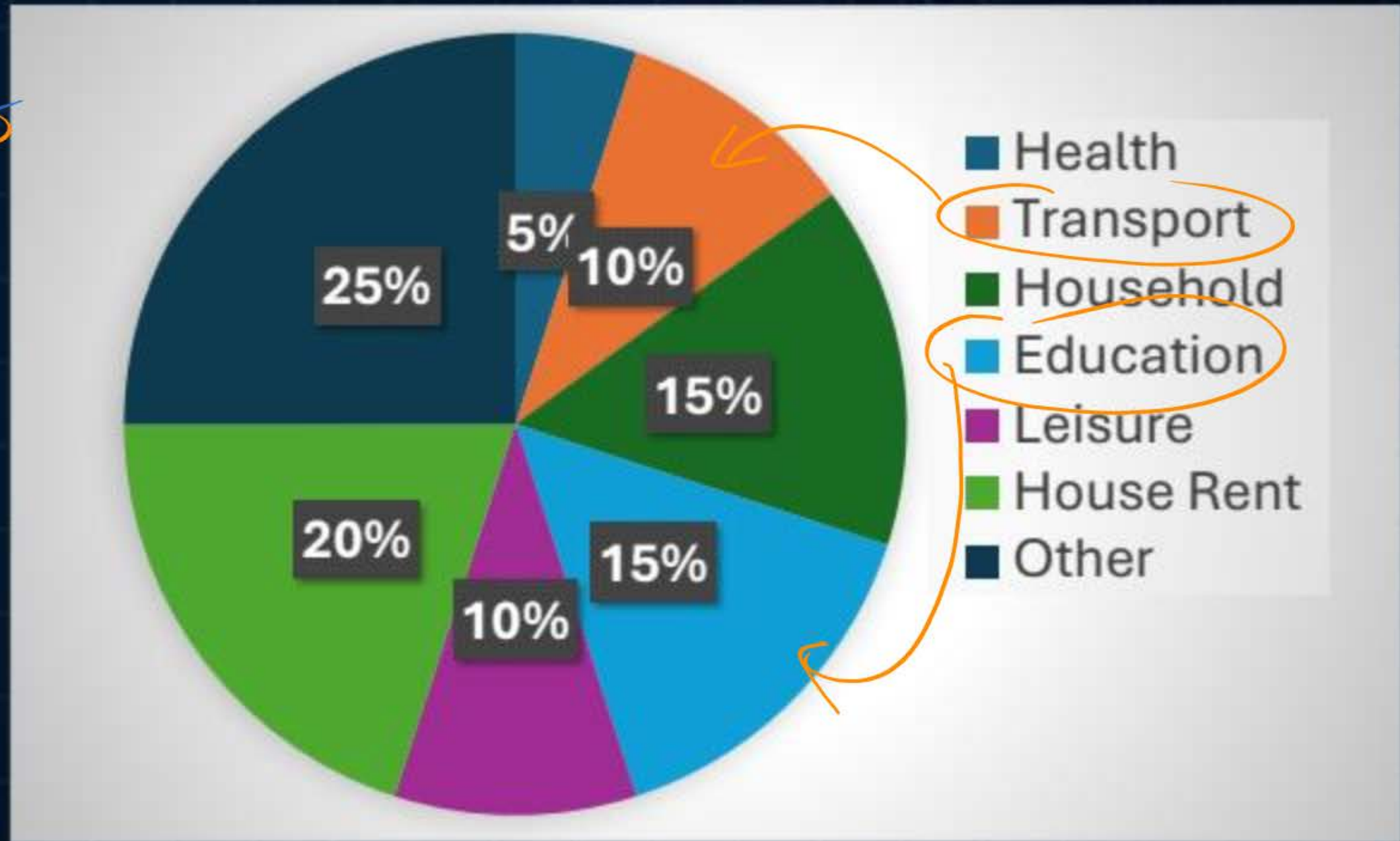
A 5

B 33.3

C 50

D 100

51.50
10%
7
1
50%



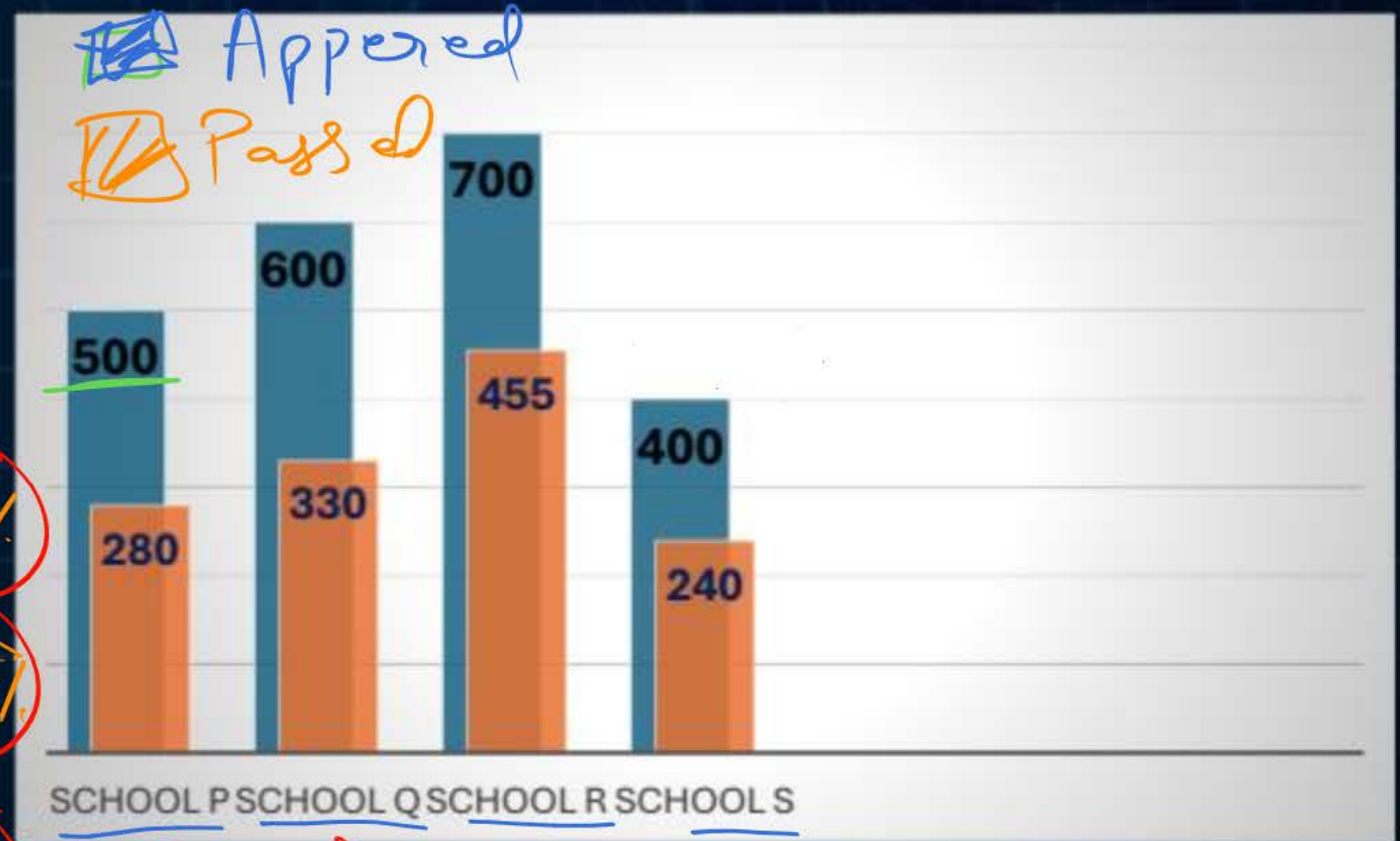
Question (PYQ GATE Exam 2020 ME)



The bar graph shows the data of the students who appeared and passed in an examination for four schools P, Q, R and S. The average of success rates (in percentage) of these four schools is -----

$$\frac{56 + 55 + 65 + 60}{4} = \frac{236}{4} = 59\%$$

- A** 58.5% **B** 58.8%
C 59.0% **D** 59.3%



$$S \Rightarrow \frac{240}{4} = 60\%$$

$$P \Rightarrow \frac{280}{5} = 56\%$$
$$Q \Rightarrow \frac{330}{6} = 55\%$$
$$R \Rightarrow \frac{455}{7} = 65\%$$

P Q R S



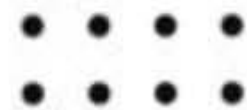
Summary



Data Interpretation

The word 'Thank' is written in a large, yellow, cursive script. A yellow arrow starts at the top of the 'T', extends horizontally to the right, and then curves downwards to point at the end of the word.

THANK



Keep Hustling!