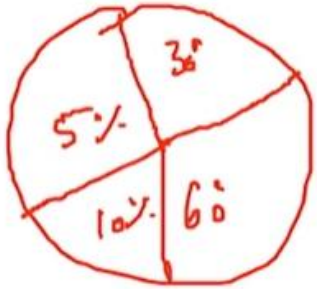
Types of Graph/Chart

Pie



Full value
100%.
360°.

1. Tabular Chart
2. Pie Chart
3. Line Graph
4. Bar Graph
5. Mixed Graphs

Important Topics of Arithmetic

1. Sum or Difference
2. Percentages
3. Ratios
4. Averages

12.5% of 160 = 20

3.125% of 320 = 10

Fraction $\xrightarrow{\times 100}$ %

$\frac{1}{1} \times 100 = 100\%$

$\frac{1}{2} \times 100 = 50\%$

$\frac{1}{4} \times 100 = 25\%$

$\frac{1}{8} = 12.5\%$

$\frac{1}{16} = 6.25\%$

$\frac{1}{32} = 3.125\%$

$\frac{1/2}{2}$

$\frac{1/4}{2} = \frac{1}{8}$

Important Topics of Arithmetic

1. Sum or Difference
2. Percentages
3. Ratios
4. Averages

$\frac{1}{3} = 33.\overline{33}\%$

$\frac{1}{9} = 11.\overline{11}\%$

$\frac{1}{6} = 16.\overline{66}\%$

$\frac{1/3}{3} = \frac{1}{9}$

$\frac{1/3}{2} = \frac{1}{6}$

$\frac{1}{1}\ \frac{1}{2}\ \frac{1}{3}\ \frac{1}{4}\ \frac{1}{5}\ \frac{1}{6}\ \boxed{\frac{1}{7}}\ \frac{1}{8}\ \frac{1}{9}\ \frac{1}{10}\ \frac{1}{11} = 9.\overline{09}\%$

1.50

⇒ 1 4 2 8 5 7

Important Topics of Arithmetic

2nd least

1. Sum or Difference
2. Percentages
3. Ratios
4. Averages

3rd least

$\Rightarrow \frac{1}{7} = 14.2857\%$

$\frac{2}{7} = 28.5714\%$

$\frac{3}{7} = 42.8571\%$

Example: Sum or Difference

Question: What is the difference between all the product sold in 2019 and 2020

Product sold in 2019 = 15.5

Product sold in 2020 = 14.5

100

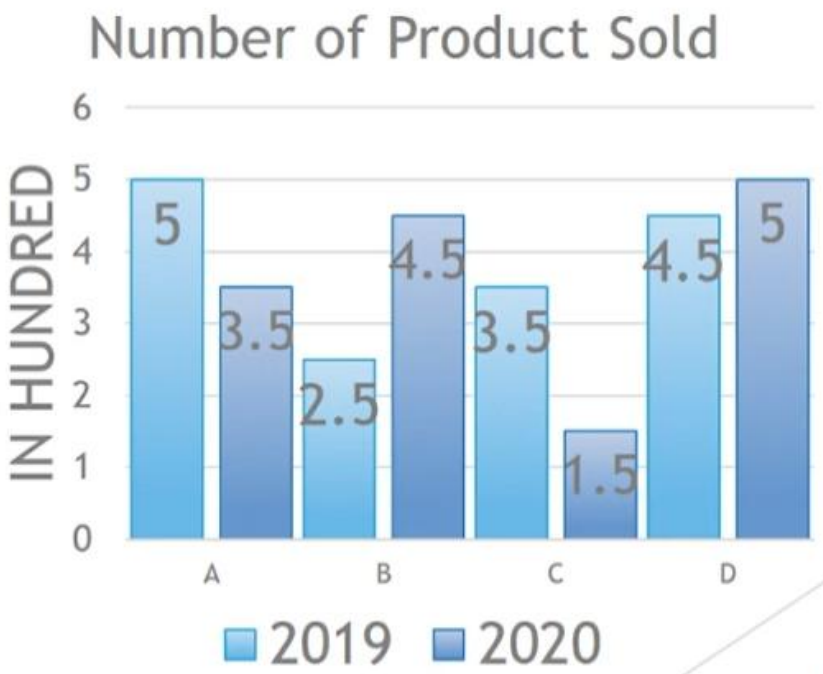
Example: Sum or Difference

1550
1450.
100

Question: What is the difference between all the product sold in 2019 and 2020

Product sold in 2019 =

Product sold in 2020 =



Example: Percentage

Question: A sold in 2020 is what percent to C sold in the same year.

A sold in 2020 =

C sold in 2020 =

Percentage = $\frac{A\,(2020)}{C\,(2020)} \times 100$

=

Example: Ratios

Question: What is the ratio of A sold in 2019 to D sold in 2020?

A sold in 2019 =

D sold in 2020 =

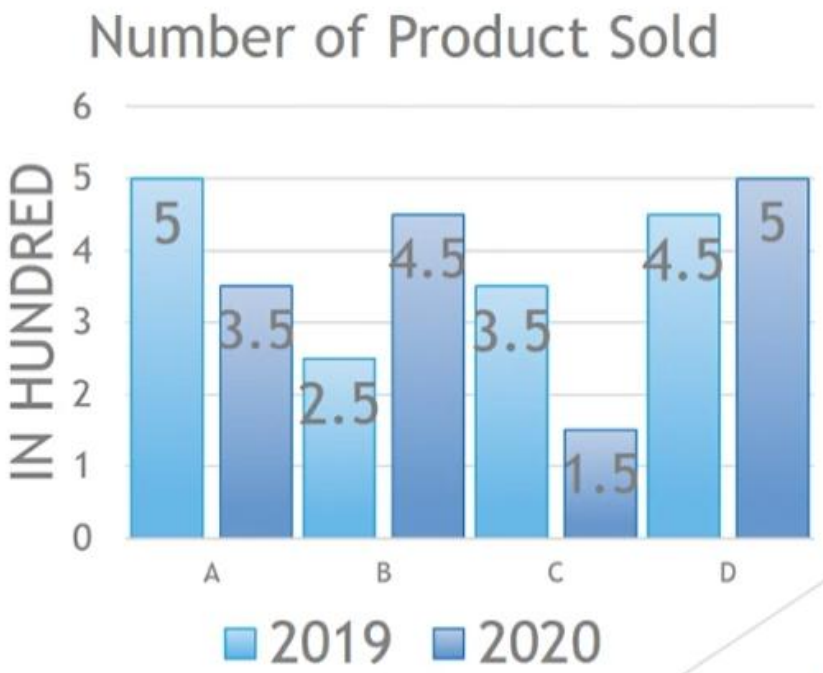
Ratio = $\frac{A\ (2019)}{D\ (2020)}$ =

Example: Average

Question: What is the average of all the product sold in 2019?

Total product sold in 2019 =

Average = $\frac{15.5}{4}$ =



Example: Tabular Chart

The following table gives marks obtained by four students in 3 different section in a company placement process.
The number in the brackets give the maximum marks in each section

Students	Sections (Maximum Marks)		
	Quantitative Aptitude(30)	Logical Reasoning (20)	Verbal(15)
Phil	28	10	10
Sam	25	18	5
Simon	15	15	15
Gloria	10	8	9

Example: Tabular Chart

What are the average score obtained by all the students in logical reasoning?

$$\text{Average} = \frac{10+18+15+8}{4}$$

Students	Sections (Maximum Marks)		
	Quantitative Aptitude(30)	Logical Reasoning (20)	Verbal(15)
Phil	28	10	10
Sam	25	18	5
Simon	15	15	15
Gloria	10	8	9

1.50

Example: Tabular Chart

7 7 1/9 x100 = 11.11

Total scores obtained by Phil is how much percent more or less than Gloria?

TS of Phil = 48
TS of Gloria = 27
Difference = 21

Percentage = 7 21/27 9 x 100 = 77.77%.

Students	Sections (Maximum Marks)		
	Quantitative Aptitude(30)	Logical Reasoning (20)	Verbal(15)
Phil	28	10	10
Sam	25	18	5
Simon	15	15	15
Gloria	10	8	9

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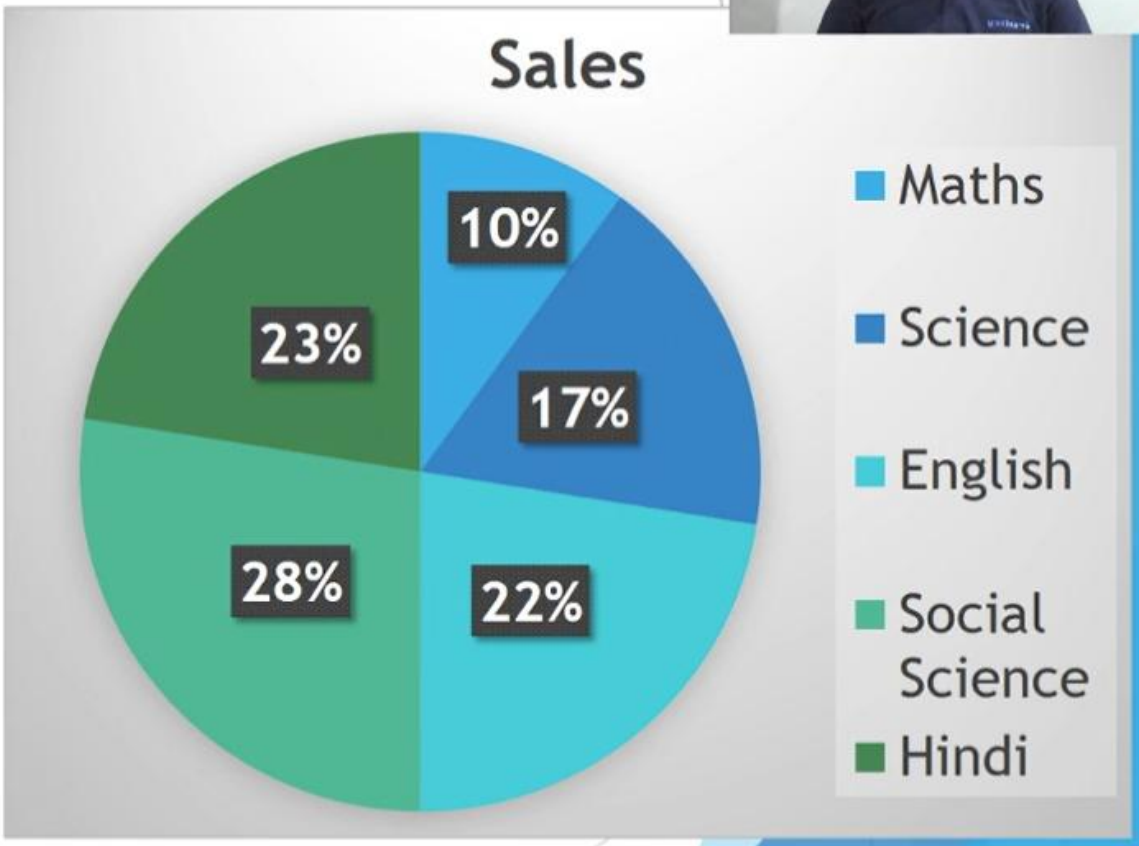
Example: Pie Chart

The following flow chart shows the percentage scored by a student in different subjects in a exam.



1.50

What is the central angle for the subject Social Science?

A. 90.5

B. 100.8

C. 105.2

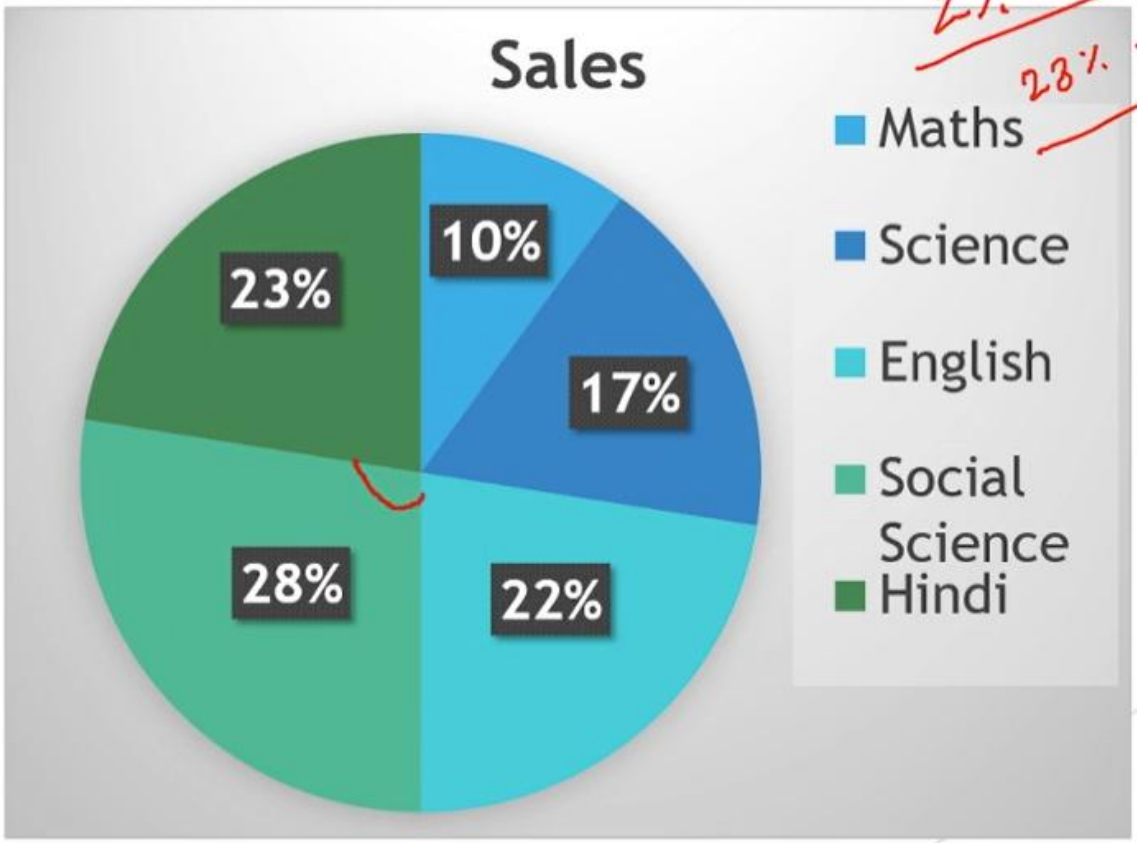
D. 120.5

100% = 360

10% = 36

1% = 3.6

28% = 3.6 × 28



Example: Pie Chart

If the total score was 360 then, what is the difference between the scores obtained in English and Maths?

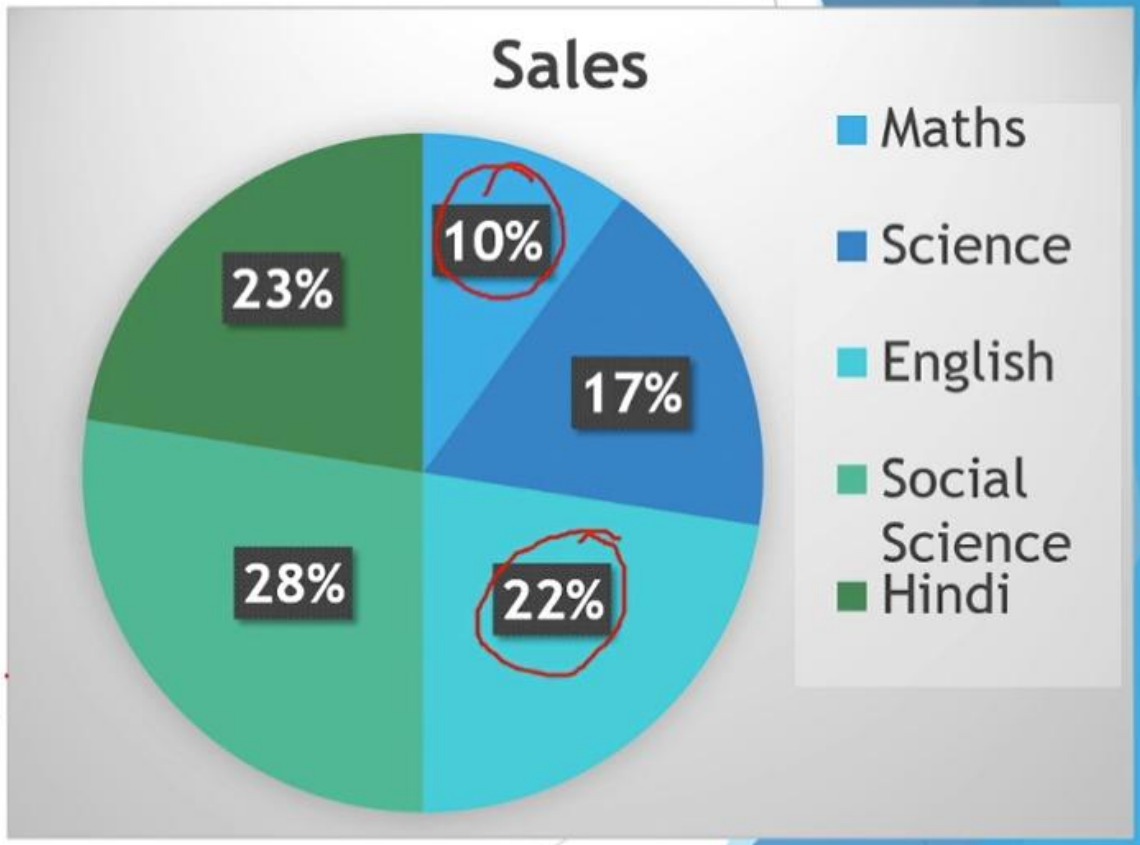
A. 87.5
B. 68.8
C. 43.2
D. 20.5

12% of 360

10% = 36

2% = 7.2

12% = 43.2



1.50

Example: Pie Chart

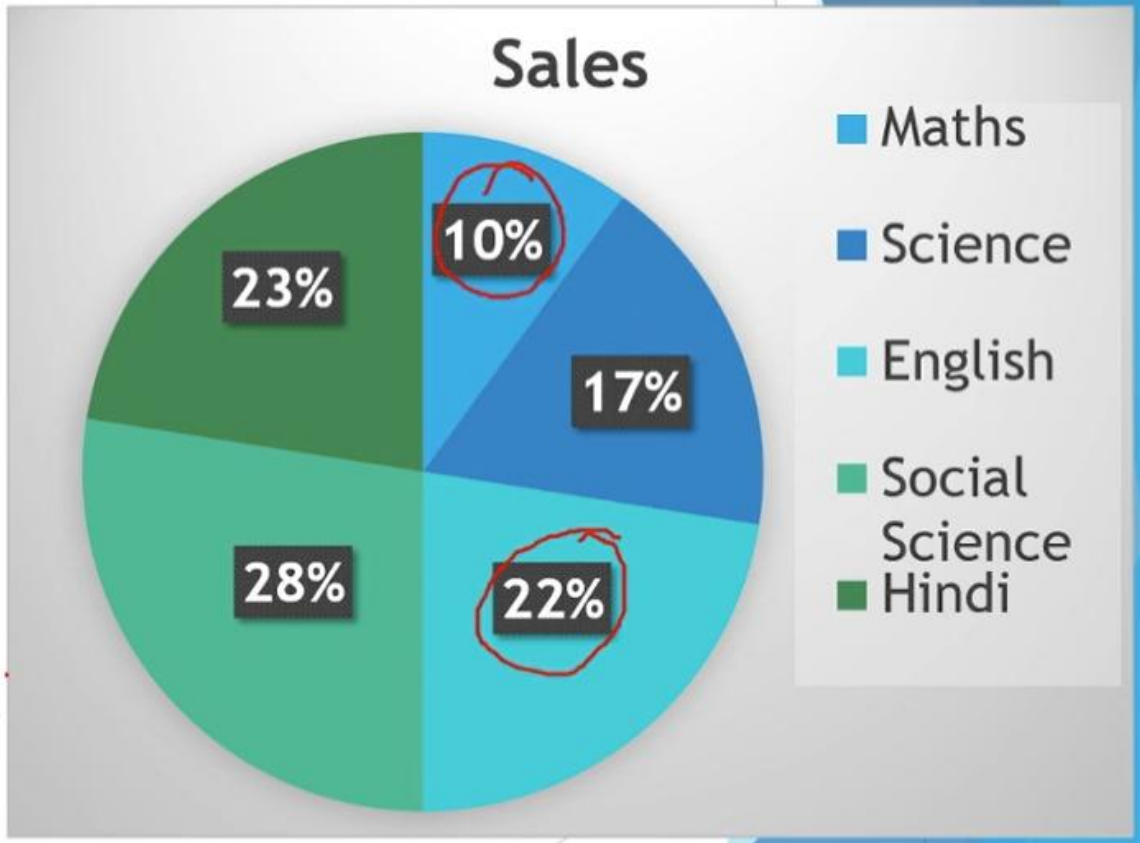
If the total score was 360 then, what is the difference between the scores obtained in English and Maths?

A. 87.5
B. 68.8
C. 43.2
D. 20.5

12% of 360

10% = 36
2% = 7.2
12% = 43.2

22% - 10% = 12%
12% of 360 =



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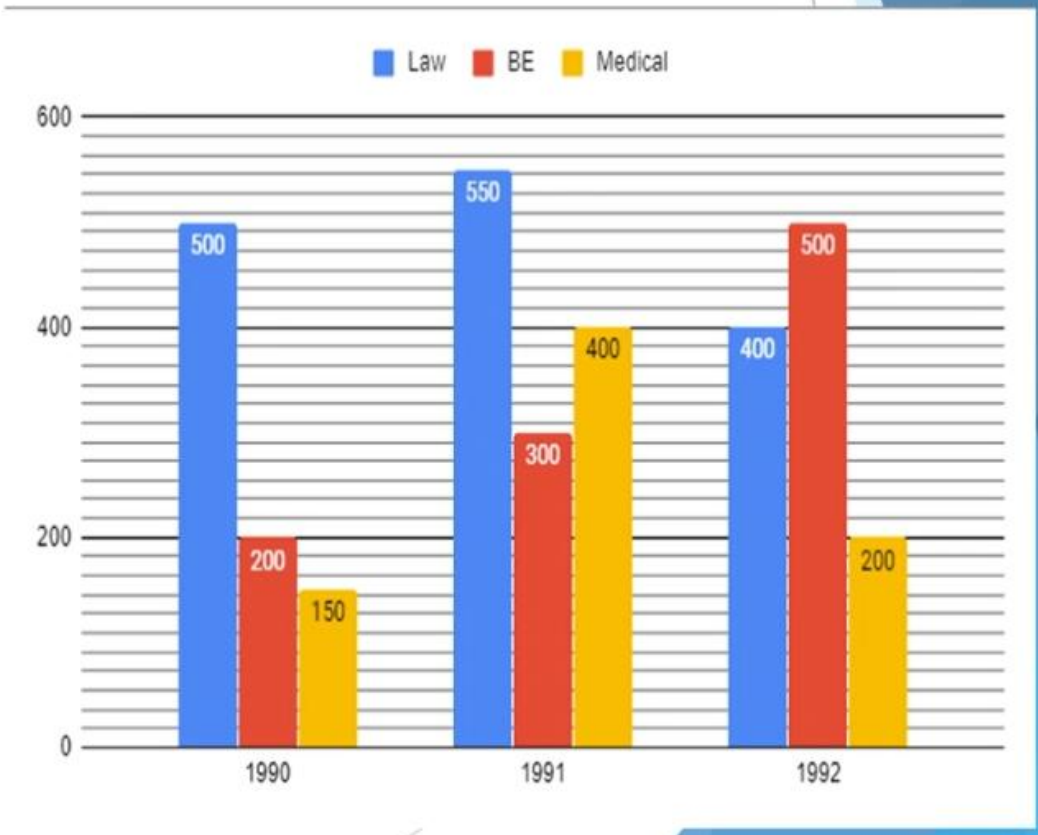
Example: Bar Graph

Given here is a multiple bar diagram depicting the change in the student strength in different courses. Study the diagram and answer the question.



Example: Bar Graph

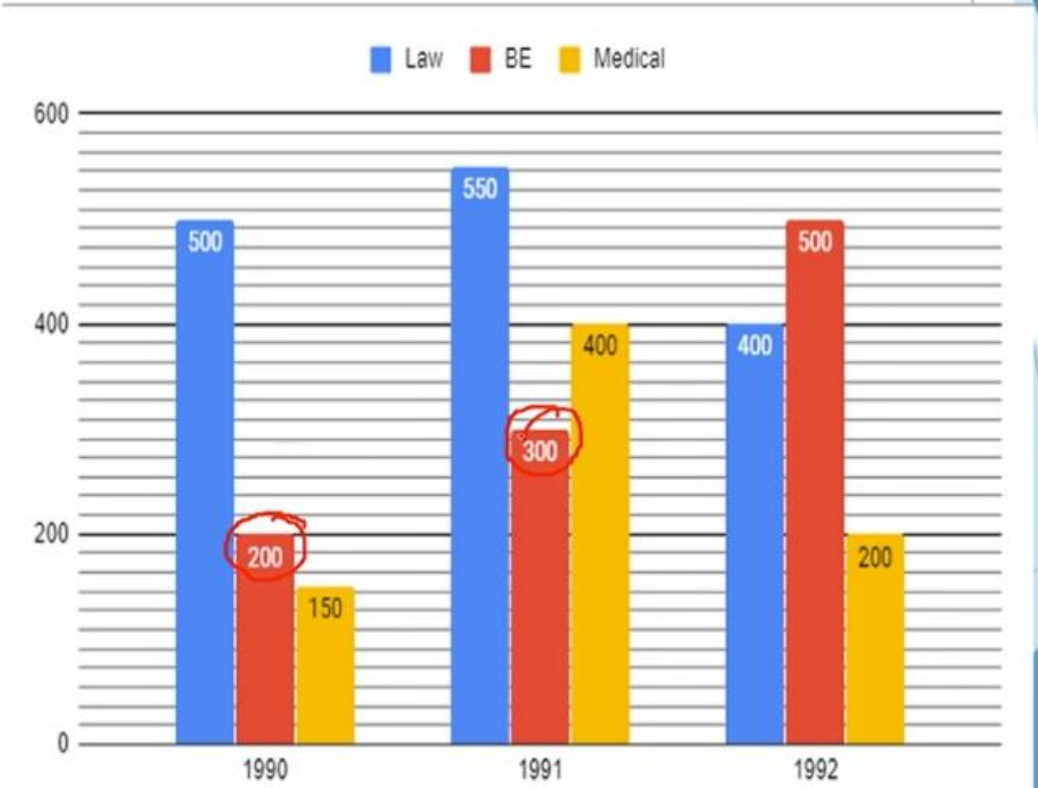
What is the ratio of students in BE in the year 1990 to 1991?

A. 3:2

B. 2:3

C. 5:4

D. None of these



$$\text{Ratio} = \frac{200}{300}$$

Example: Bar Graph

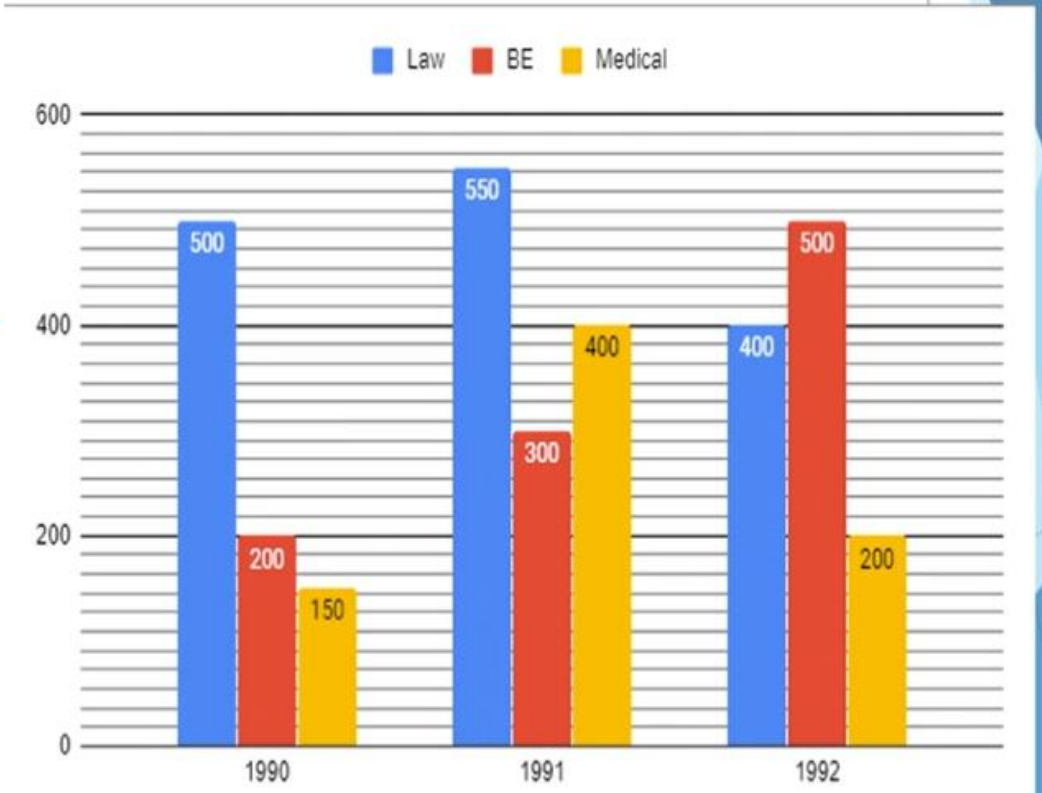
Calculate the percentage of students in Law out of the total students in the year 1990?

A. 103

B. 78

C. 58.8

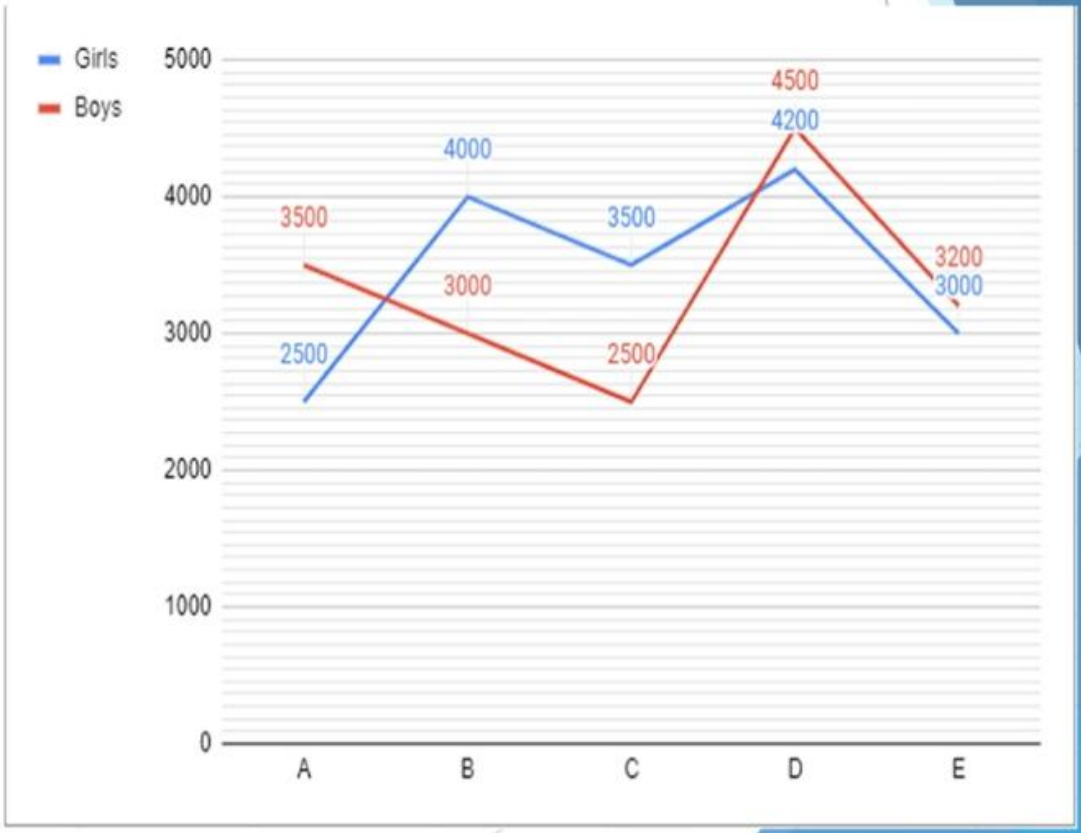
D. 23.4



Percentage $= \frac{500}{850}$

Example: Line Chart

On the basis of the figure answer the following question. The number of girls and boys are given in 5 different exam Centre. Study this graph properly and answer the questions.



Example: Line Chart

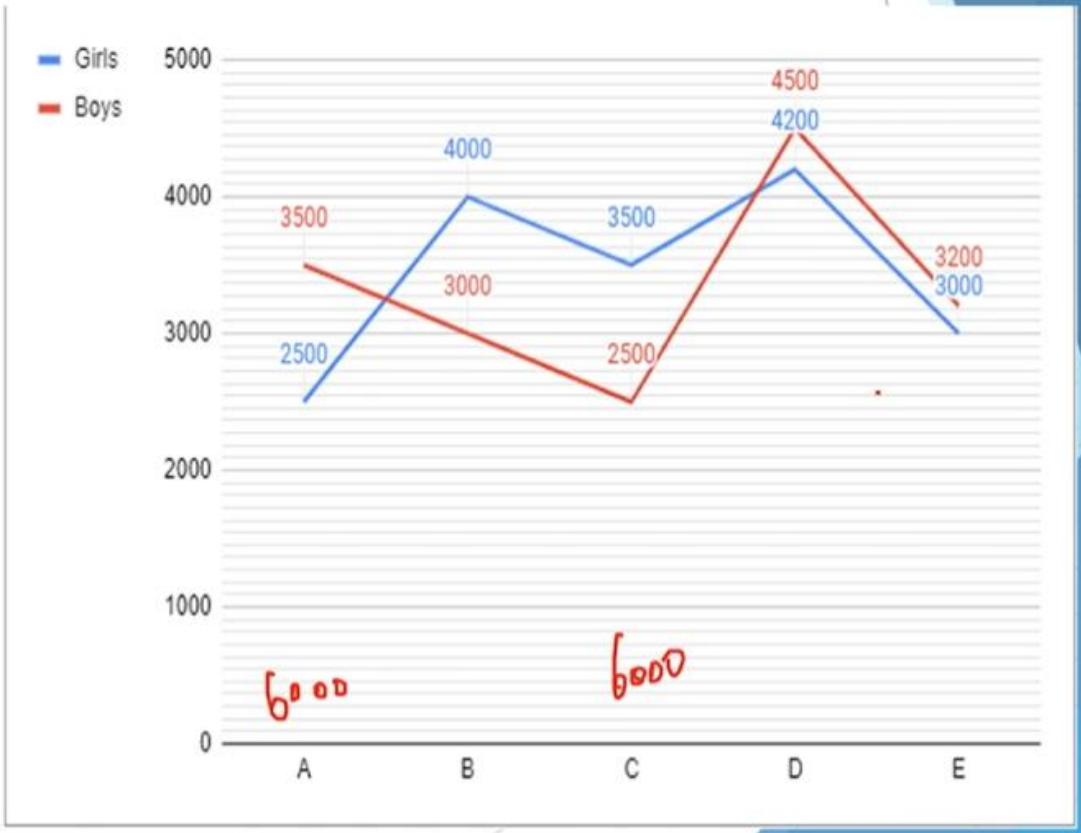
Which exam center has the lowest number of candidates?

A. B

B. C & A

C. D

D. E & A



1.50

What percentage will be the number of girls in A out of the total number of girls in all the coaching center?

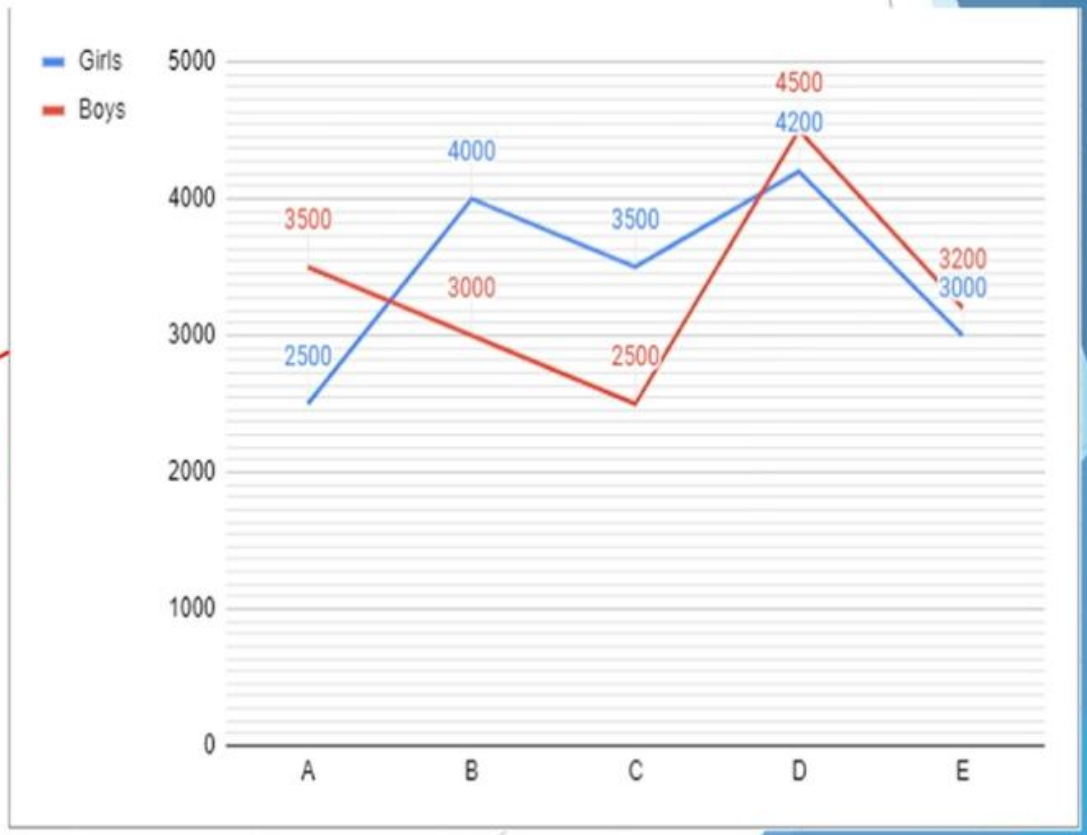
A. 14.5
B. 17.4
C. 22.5
D. 24.4

Total number of girls =

Percentage =

$$\frac{Number\ of\ girls\ in\ A}{Total\ number\ of\ girls}$$

$$= \frac{2500}{17200} \times 100$$



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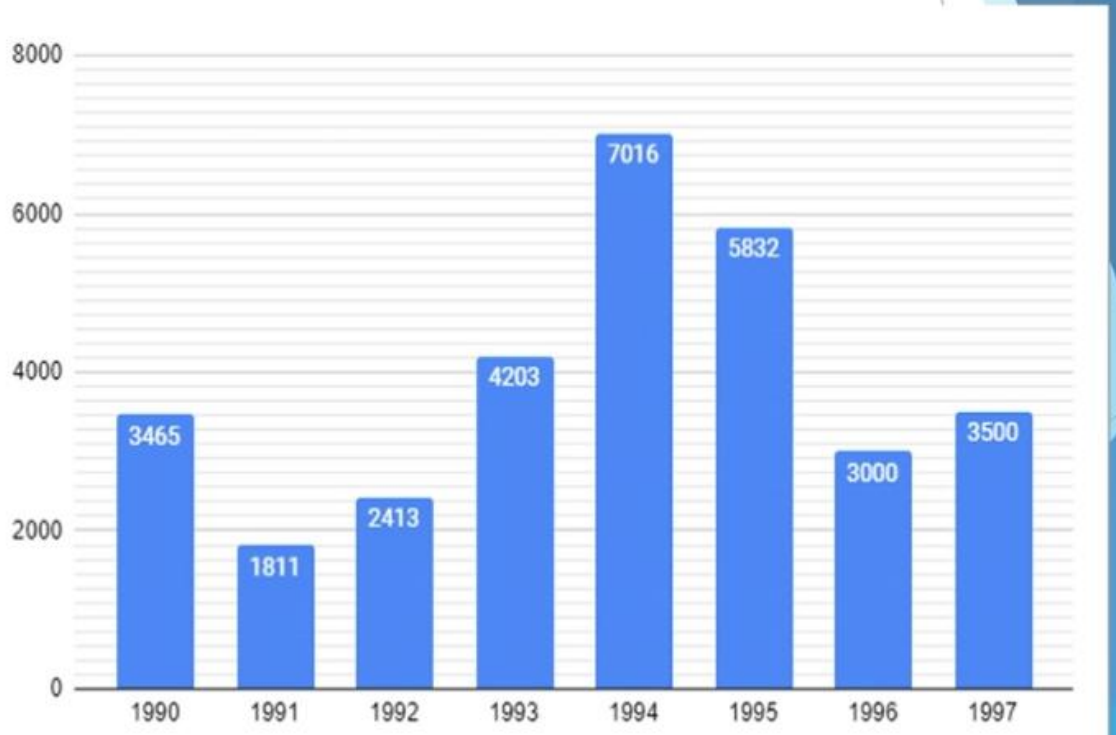
Read the graph and answer the questions. Given the number of mobile phone user in different year.



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In which year did the number of users register the highest Percentage over its preceding year?

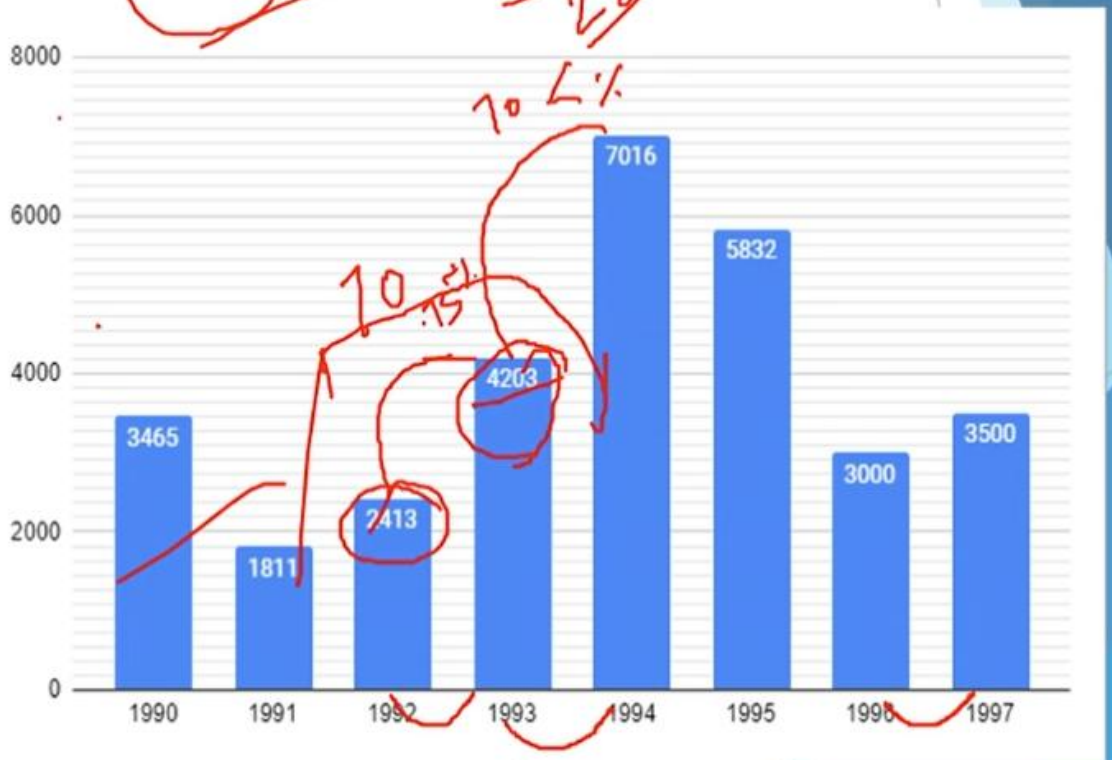
A. 1997

B. 1994

C. 1993

D. 1992

Percentage change = $\frac{Final - Initial}{Initial} \times 100$



1.50

Avg = 3905

Sum / 8

a : b = 8

What is the ratio of the years which have above average users to those which have below average users.

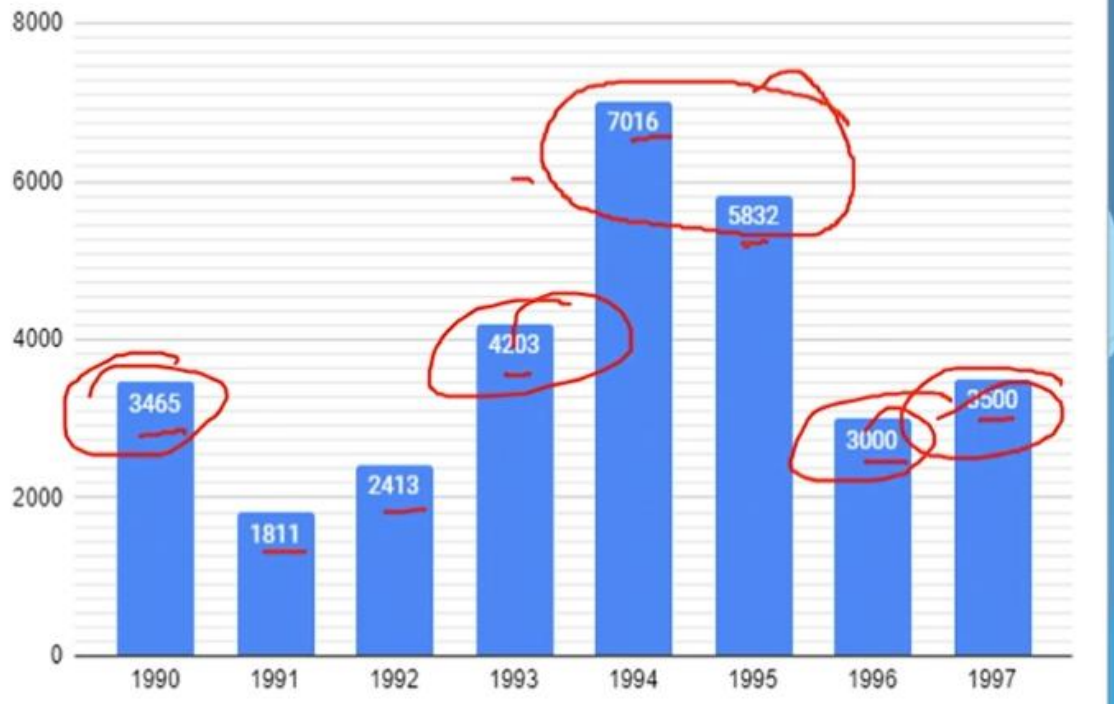
A. 8:3

B. 3:8

C. 3:5

D. 5:3

Average = $\frac{31240}{8}$



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1.50

Above Avg : Below Avg.
More
Less

What is the ratio of the years which have above average users to those which have below average users.

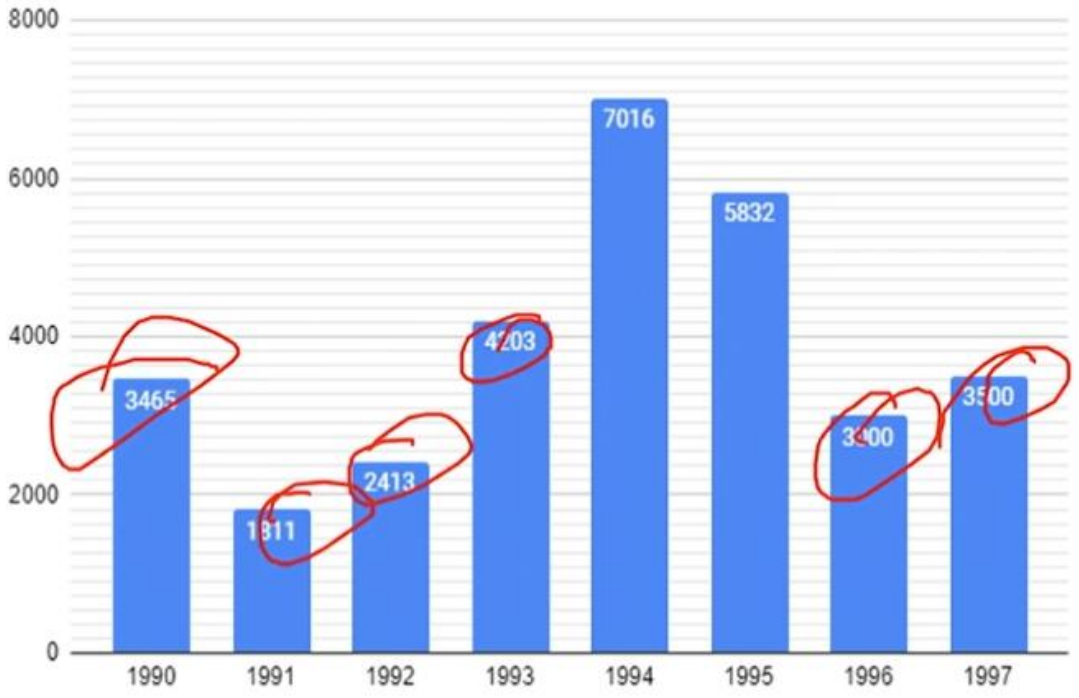
A. 8:3

B. 3:8

C. 3:5

D. 5:3

3905



$$\text{Average} = \frac{31240}{8}$$

The increase in the number of users in 1997 was what percent of the users in 1996

A. 10%
B. 16.66%
C. 20%
D. 25%