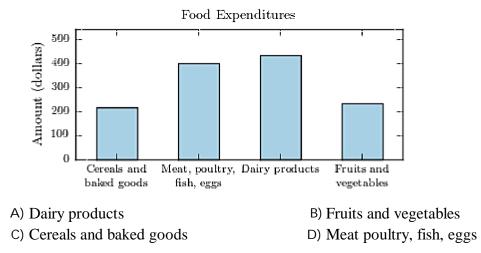


MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) The following bar graph presents the average amount a certain family spent, in dollars, on 1) ______ various food categories in a recent year.

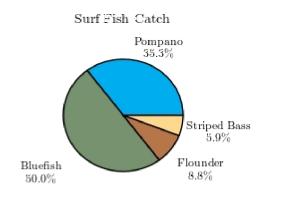
On which food category was the most money spent?



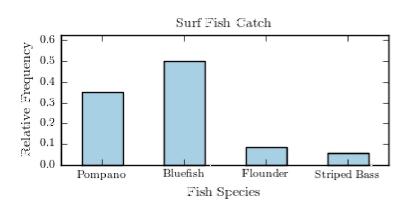
2) The following pie chart presents the percentages of fish caught in each of four ratings categories.

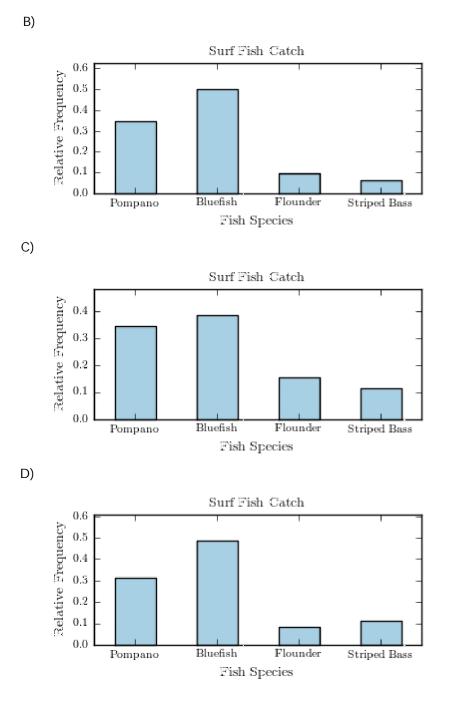
2)

Match this pie chart with its corresponding bar graph.



A)

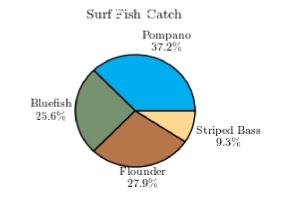




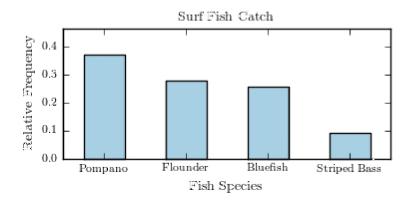
3) The following pie chart presents the percentages of fish caught in each of four ratings categories.

3)

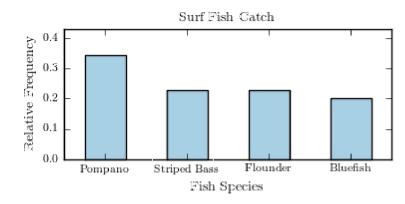
Match this pie chart with its corresponding Parato chart.



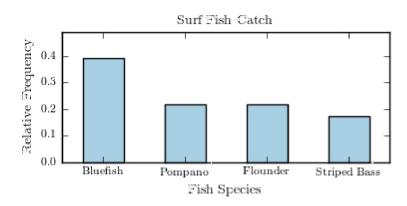
A)

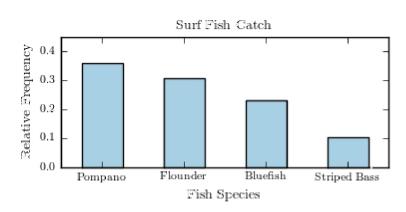


B)

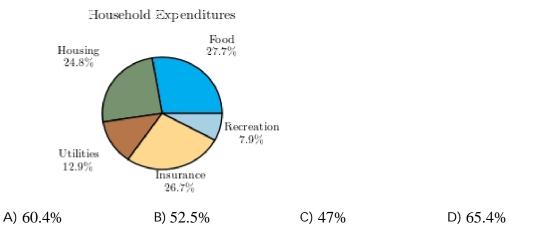








4) Following is a pie chart that presents the percentages spent by a certain household on its
4) ______
five largest annual expenditures. What percentage of the money spent was spent on food, housing, and utilities?

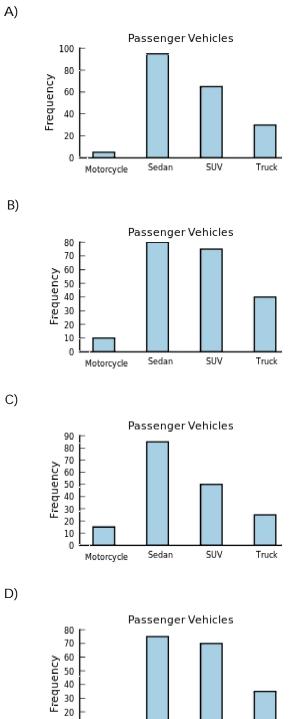


5) The following frequency distribution presents the frequency of passenger vehicles that 5) _ pass through a certain intersection from 8:00 AM to 9:00 AM on a particular day.

4

Vehicle Type	Frequency
Motorcycle	15
Sedan	85
SUV	50
Truck	25

Construct a frequency bar graph for the data.



Sedan

SUV

Truck

10 0

Motorcycle



Vehicle TypeFrequencyMotorcycle7Sedan79SUV78Truck45

What is the relat	tive frequency of the SUV	category?	
A) 78	B) 0.987	C) 0.373	D) 78%

7) The following frequency distribution presents the frequency of passenger vehicles that pass through a certain intersection from 8:00 AM to 9:00 AM on a particular day.

Vehicle TypeFrequencyMotorcycle13Sedan78SUV88Truck35

Construct a relative frequency distribution for the data.

A)

Vehicle Type	Relative Frequency
Motorcycle	0.13
Sedan	0.78
SUV	0.88
Truck	0.35

B)

Vehicle Type	Relative Frequency
Motorcycle	0.148
Sedan	0.886
SUV	1
Truck	0.398

C)

Vehicle Type	Relative Frequency
Motorcycle	0.061
Sedan	0.364
SUV	0.411
Truck	0.164

6) The following frequency distribution presents the frequency of passenger vehicles that pass through a certain intersection from 8:00 AM to 9:00 AM on a particular day.

7) _____

6) _____

D)

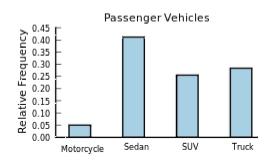
Vehicle Type	Relative Frequency
Motorcycle	0.061%
Sedan	0.364%
SUV	0.411%
Truck	0.164%

8) The following frequency distribution presents the frequency of passenger vehicles that pass through a certain intersection from 8:00 AM to 9:00 AM on a particular day.

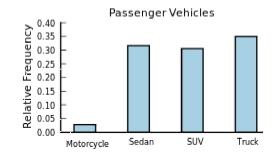
Vehicle Type	Frequency
Motorcycle	7
Sedan	58
SUV	36
Truck	40

Construct a relative frequency bar graph for the data.

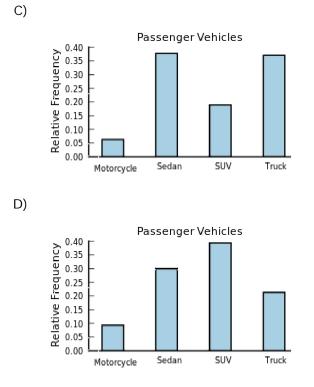




B)



8) _____

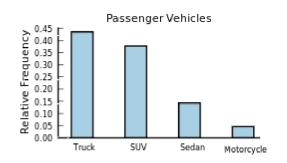


9) The following frequency distribution presents the frequency of passenger vehicles that pass through a certain intersection from 8:00 AM to 9:00 AM on a particular day.

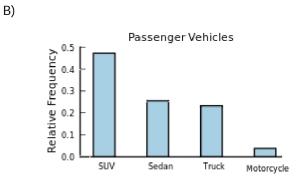
Vehicle Type	Frequency
Motorcycle	5
Sedan	33
SUV	61
Truck	30

Construct a relative frequency Parato chart for the data.

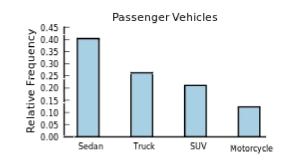
A)



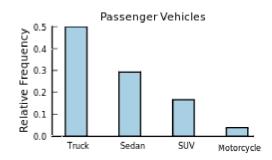
9)



C)



D)

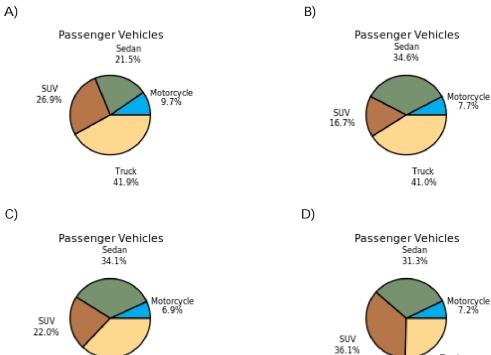


10) The following frequency distribution presents the frequency of passenger vehicles that pass through a certain intersection from 8:00 AM to 9:00 AM on a particular day.

Vehicle Type	Frequency
Motorcycle	6
Sedan	26
SUV	30
Truck	21

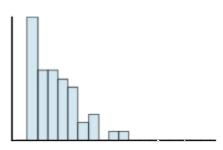
Truck 37.0%

Construct a pie chart for the data.



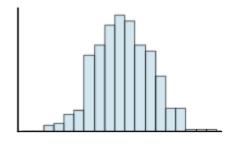
10) _____

Truck 25.3% 11) Classify the histogram as skewed to the left, skewed to the right, or approximately symmetric.



- A) skewed to the left
- B) approximately symmetric
- C) skewed to the right

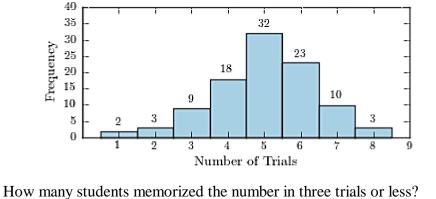
12) Classify the histogram as unimodal or bimodal.



A) unimodal

B) bimodal

13) One hundred students are shown an eight-digit number on a piece of cardboard for three
13 seconds and are asked to then recite the number from memory. The process is repeated until the student accurately recites the entire number from memory. The following histogram presents the number of trials it took each student to memorize the number.



A) 86 B) 5 C) 14 D) 16

12) _____

11) _____

Weight (lb)	Frequency	_	
130-137	3	_	
138-145	2		
146-153	8		
154-161	3		
162-169	5		
170-177	9		
178-185	5		
186-193	2		

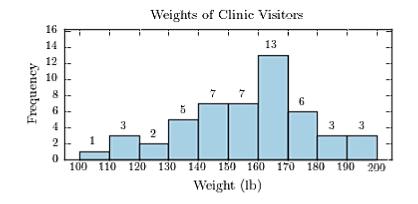
14) The following frequency distribution presents the weights in pounds (lb) of a sample of visitors to a health clinic.

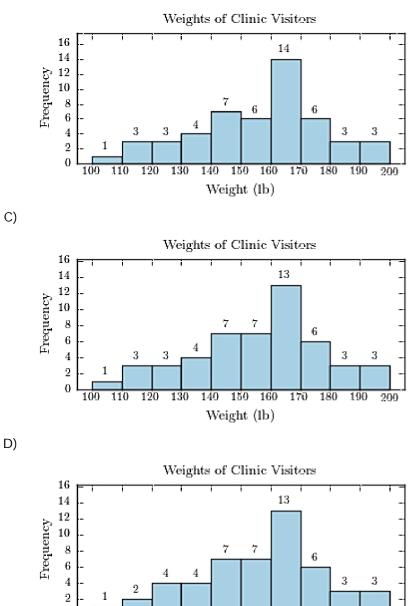
14) _____

Weights of Clinic Visitors		
Weight (lb)	Frequency	
100 - 109	1	
110 - 119	3	
120 - 129	3	
130 - 139	4	
140 - 149	7	
150 - 159	7	
160 - 169	13	
170 - 179	6	
180 - 189	3	
190 - 199	3	

Construct a frequency histogram.

A)





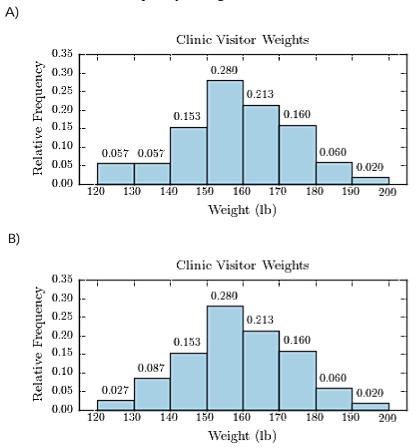
Weight (lb)

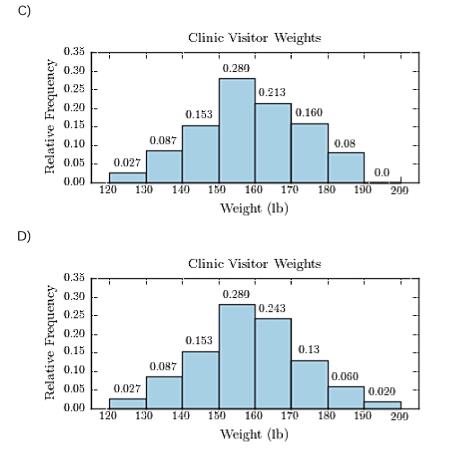
16) The following frequency distribution presents the weights in pounds (lb) of a sample of visitors to a health clinic.

16)

Clinic Visitor Weights		
Weight (lb)	Frequency	
120 - 129	4	
130 - 139	13	
140 - 149	23	
150 - 159	42	
160 - 169	32	
170 - 179	24	
180 - 189	9	
190 - 199	3	

Construct a relative frequency histogram.





17) The following table presents the purchase totals (in dollars) of a random sample of gasoline purchases at a convenience store.

Construct a frequency distribution using a class width of 10, and using 0 as the lower class limit for the first class.

76.59	48.55	93.66	60.17	39.10
93.28	65.43	34.12	80.41	77.16
80.07	93.46	39.19	43.84	44.70
68.74	89.98	6.97	52.86	68.93

17)

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D	۱
Б)
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Convenience Store	Gas Purchases	Convenience Store	Gas Purchas
Amount (dollars)	Frequency	Amount (dollars)	Frequency
0.00-9.99	1	0.00-9.99	1
10.00 - 19.99	0	10.00 - 19.99	0
20.00-29.99	0	20.00-29.99	0
30.00-39.99	3	30.00-39.99	3
40.00 - 49.99	3	40.00 - 49.99	3
50.00-59.99	1	50.00-59.99	1
60.00-69.99	4	60.00-69.99	4
70.00-79.99	2	70.00-79.99	2
80.00-89.99	4	80.00-89.99	3
90.00-99.99	2	90.00-99.99	3
Convenience Store Amount (dollars)		Convenience Store Amount (dollars)	
0.00-9.99	Frequency 1	0.00-9.99	Frequency 1
	1	0.00 - 9.99	1
10.00 - 19.99	0	10.00.10.00	0
20.00.20.00	0	10.00-19.99	0
20.00-29.99	1	20.00-29.99	0
30.00-39.99	1 2	20.00-29.99 30.00-39.99	0 4
30.00-39.99 40.00-49.99	1 2 3	20.00-29.99 30.00-39.99 40.00-49.99	0 4 2
30.00-39.99 40.00-49.99 50.00-59.99	1 2 3 1	20.00-29.99 30.00-39.99 40.00-49.99 50.00-59.99	0 4 2 1
30.00-39.99 40.00-49.99 50.00-59.99 60.00-69.99	1 2 3 1 4	20.00-29.99 30.00-39.99 40.00-49.99 50.00-59.99 60.00-69.99	0 4 2 1 4
30.00-39.99 40.00-49.99 50.00-59.99 60.00-69.99 70.00-79.99	1 2 3 1 4 2	20.00-29.99 30.00-39.99 40.00-49.99 50.00-59.99 60.00-69.99 70.00-79.99	$ \begin{array}{c} 0 \\ 4 \\ 2 \\ 1 \\ 4 \\ 2 \end{array} $
30.00-39.99 40.00-49.99 50.00-59.99 60.00-69.99	1 2 3 1 4	20.00-29.99 30.00-39.99 40.00-49.99 50.00-59.99 60.00-69.99	$ \begin{array}{c} 0 \\ 4 \\ 2 \\ 1 \\ 4 \end{array} $

18) The following table presents the purchase totals (in dollars) of a random sample of gasoline purchases at a convenience store.

Construct a relative frequency distribution using a class width of 10, and using 0 as the lower class limit for the first class.

44.52	72.67	51.20	59.41	64.86
98.05	80.24	56.18	51.93	46.17
88.08	46.49	24.48	50.26	36.77
27.61	6.56	22.75	36.65	74.55

18) _____

A)

Convenience Store Gas Purchases

Amount (dollars)	Relative Frequency
0.00-9.99	0.050
10.00 - 19.99	0.000
20.00-29.99	0.150
30.00-39.99	0.100
40.00 - 49.99	0.150
50.00-59.99	0.250
60.00 - 69.99	0.050
70.00-79.99	0.100
80.00-89.99	0.100
90.00-99.99	0.050

B)

Convenience Store Gas Purchases				
Amount (dollars)	Relative Frequency			
0.00-9.99	0.050			
10.00 - 19.99	0.000			
20.00 - 29.99	0.150			
30.00-39.99	0.100			
40.00 - 49.99	0.150			
50.00-59.99	0.250			
60.00-69.99	0.040			
70.00-79.99	0.110			
80.00-89.99	0.100			
90.00-99.99	0.050			

C)

Convenience Store Gas Purchases			
Amount (dollars)	Relative Frequency		
0.00-9.99	0.050		
10.00 - 19.99	0.000		
20.00-29.99	0.150		
30.00-39.99	0.100		
40.00 - 49.99	0.150		
50.00-59.99	0.240		
60.00-69.99	0.060		
70.00-79.99	0.100		
80.00-89.99	0.100		
90.00-99.99	0.050		

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Convenience Store Gas Purchases			
Amount (dollars)	Relative Frequency		
0.00-9.99	0.035		
10.00 - 19.99	0.015		
20.00 - 29.99	0.150		
30.00-39.99	0.100		
40.00 - 49.99	0.150		
50.00-59.99	0.250		
60.00-69.99	0.050		
70.00-79.99	0.100		
80.00-89.99	0.100		
90.00-99.99	0.050		

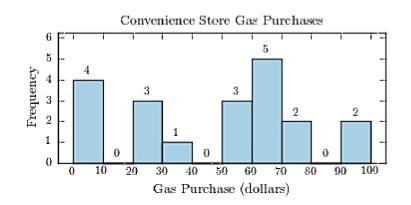
19) The following table presents the purchase totals (in dollars) of a random sample of gasoline purchases at a convenience store.

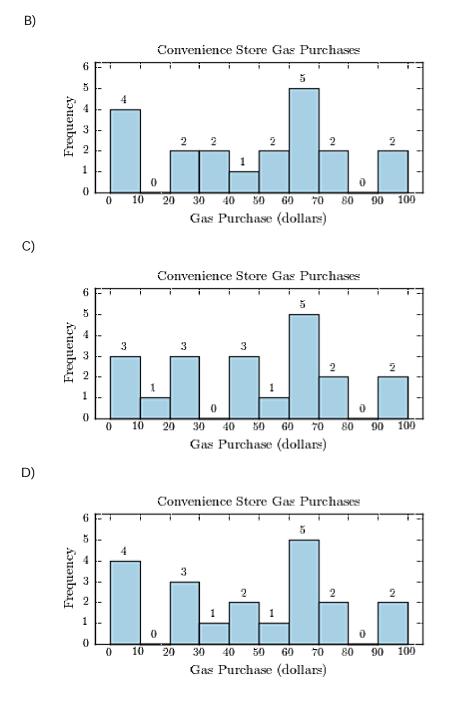
19)

Construct a frequency histogram using a class width of 10, and using 0 as the lower class limit for the first class.

95	99	4	75	23
26	27	65	68	69
31	7	72	67	46
0	46	1	53	67

A)



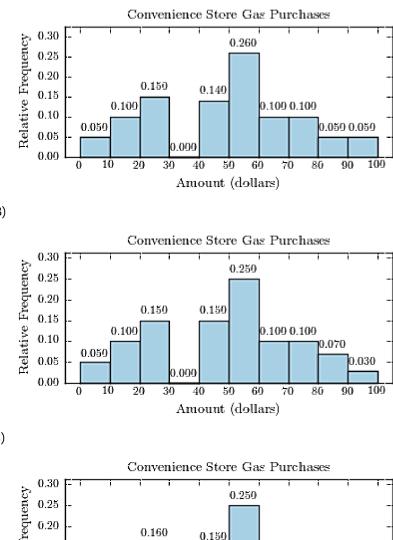


20) The following table presents the purchase totals (in dollars) of a random sample of gasoline purchases at a convenience store.

20) _____

Construct a relative frequency histogram using a class width of 10, and using 0 as the lower class limit for the first class.

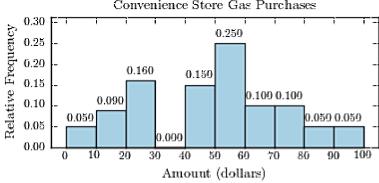
22.75	53.99	60.56	86.86	10.98
28.88	77.87	5.04	68.60	40.07
74.42	52.19	94.89	29.08	50.87
13.49	50.49	43.20	55.53	49.59

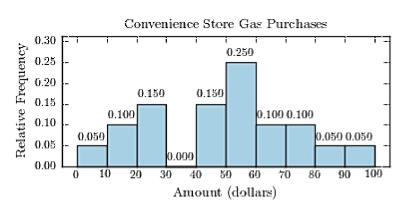


B)

A)

C)



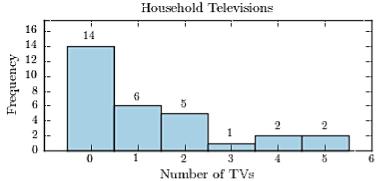


21) Thirty households were surveyed for the number of televisions in each home. Following 21) _________21) ________

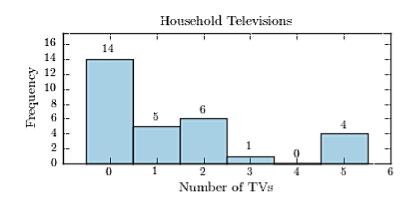
1	0	0	2	1	2	4	2	1	1
0	0	0	0	1	5	0	2	0	0
0	0	2	1	0	0	5	5	3	0

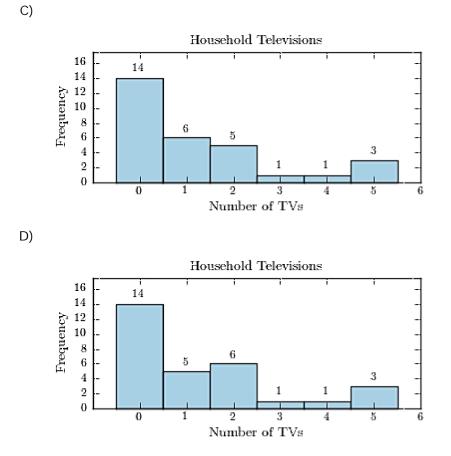
Construct a frequency histogram.

A)



B)



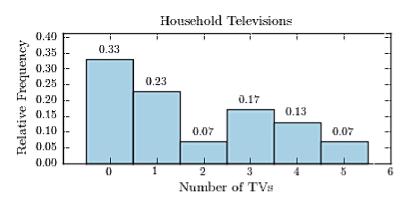


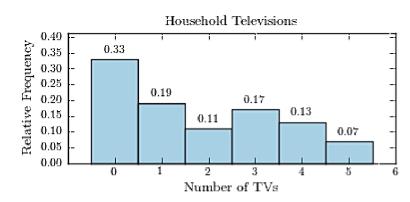
22) Thirty households were surveyed for the number of televisions in each home. Following 22) _________are the results.

4	0	4	3	0	0	4	1	0	4
0	1	1	0	1	1	5	2	5	1
3	0	3	0	1	0	3	2	3	0

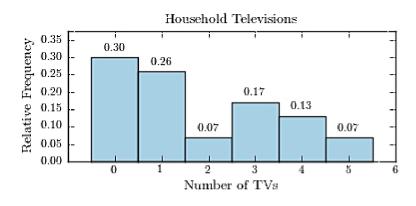
Construct a relative frequency histogram.

A)

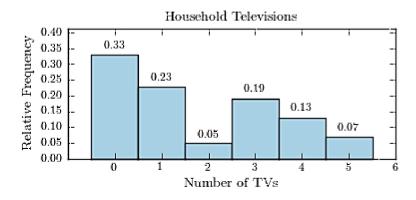




C)



D)



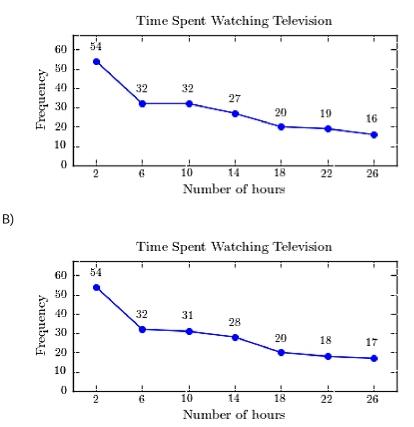
Time Spent Watch	ing Television
Number of hours	Frequency
0.0-3.9	54
4.0-7.9	32
8.0 - 11.9	32
12.0-15.9	27
16.0 - 19.9	20
20.0-23.9	18
24.0-27.9	17

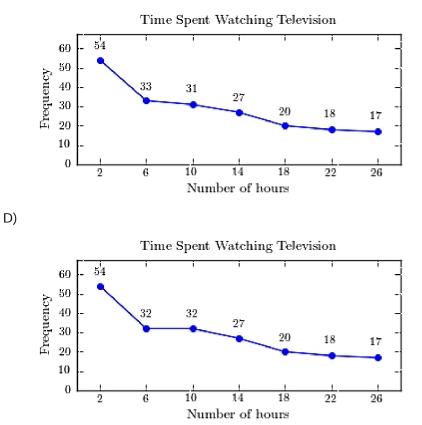
23) A sample of 200 high school students were asked how many hours per week they spend watching television. The following frequency distribution presents the results.

23)

Construct a frequency polygon for the frequency distribution.

A)





24) A sample of 200 high school students were asked how many hours per week they spend24) _________24) _________

 Time Spent Watching Television

 Number of hours
 Frequency

 0.0-3.9
 74

 4.0-7.9
 57

 8.0-11.9
 35

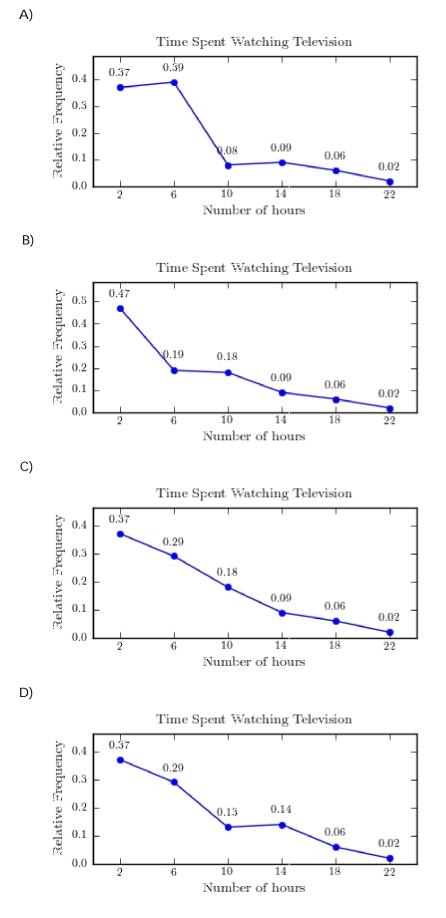
 12.0-15.9
 18

 16.0-19.9
 32

 20.0-23.9
 4

Construct a relative frequency polygon for the frequency distribution.

C)

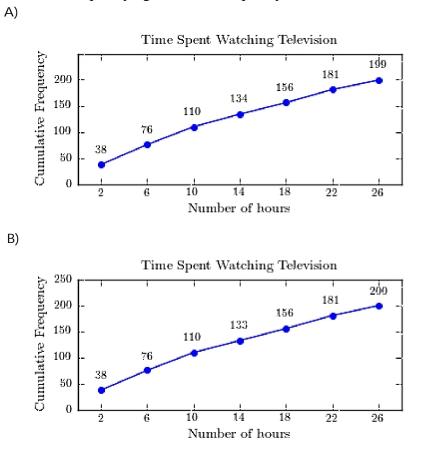


Time Spent Watching Television						
Number of hours	Frequency					
0.0-3.9	38					
4.0-7.9	38					
8.0 - 11.9	34					
12.0-15.9	23					
16.0 - 19.9	24					
20.0-23.9	23					
24.0-27.9	20					

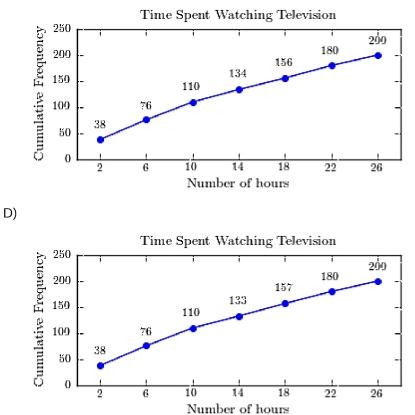
25) A sample of 200 high school students were asked how many hours per week they spend watching television. The following frequency distribution presents the results.

25)

Construct a frequency ogive for the frequency distribution.



27



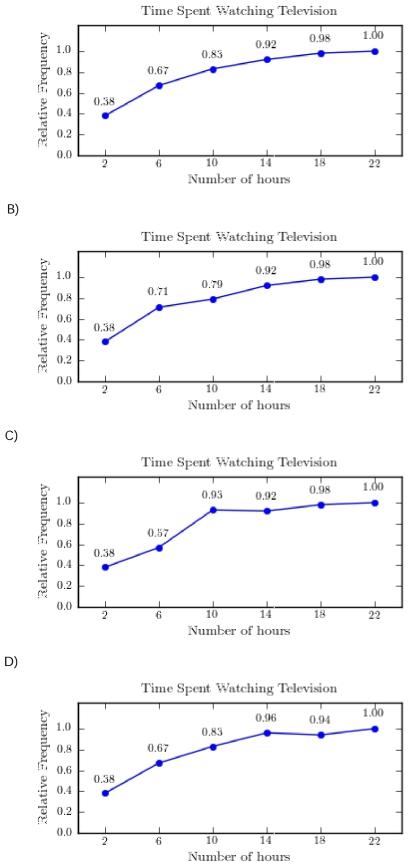
26) A sample of 200 high school students were asked how many hours per week they spend watching television. The following frequency distribution presents the results.

> Time Spent Watching Television Number of hours Frequency 0.0-3.976574.0-7.98.0-11.9 32 12.0-15.9 1816.0-19.9 13 20.0-23.9 4

Construct a relative frequency ogive for the frequency distribution.

26)

C)



A)

27) Construct a stem-and-leaf plot for the following data.

				10		0.0	07	20			-	
	22	38	51	12	57	33	67	20	31	29		
	19	48	19	31	29	53	54	21	22	55		
											-	
A)										B)		
	1	29								-	1	99
	2	01229	999								2	0122299
	3	1138									3	1138
	4	8									4	8
	5	1345'	7								5	13457
	6	7									6	7
\sim												
C)										D)		
	1	299								-	1	299
	2	0229	9								2	012299
	3	1113	8								3	1138
	4	8									4	8
	5	1345'	7								5	13457
	6	7									6	7

27) _____

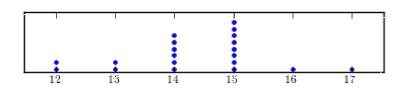
28) Construct a stem-and-leaf plot for the following data, in which the leaf represents the tenths place.

	8.9 6.1	6.7 9.2	$4.3 \\ 10.4$	9.9 9.7	9.3 9.8	$\begin{array}{c} 10.6\\ 10.6\end{array}$	9.5 6.8	7.8 3.0	3.0 7.6	5.3 9.3	8.1 3.9	10.6 6.2
				2.1					1.0	5.0	· · ·	
A)								B))			
	3	09							3	. 009		
	4	03							4			
	5	3							5	337		
	6	1278							6	128		
	7	68							7	68		
	8	19							8	19		
	9	23356	6789						9	233	5789	
	10	466							10	466	6	
C)								D)				
-,								-,				
	3	009	••						3	009		•
	4	33							4	3		
	5								5	3		
	6	278							6	-127	8	
	7	168							7	68		
	8	19							8	19		
	9	2335'	789						9	233	5789	
	10	4666							10	466	6	

29) Construct a dotplot for the following data.

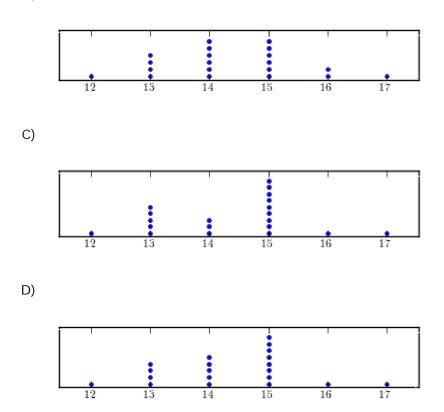
1515151413131415131514151413171514121615

A)

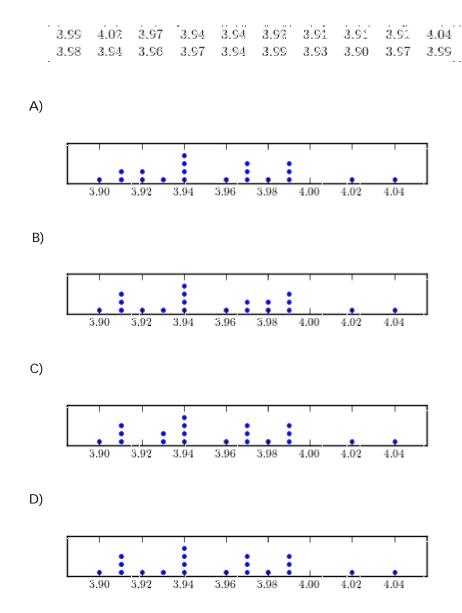


28) _____

29) _____



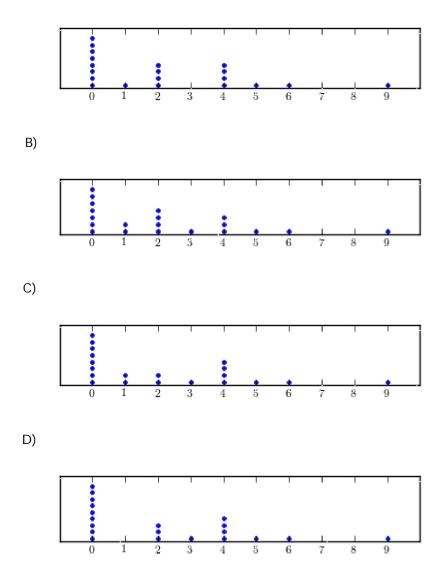
30) _____



30) Construct a dotplot for the following data.

31) Following are the numbers of Dean's List students in a random sample of 20 university31) ______31) ______

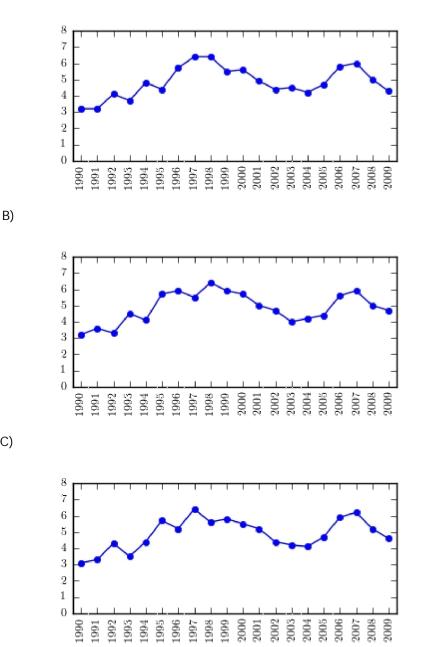
9	2	0	0	4
2	0	0	4	0
4	2	0	0	5
6	1	2	0	$\overline{4}$



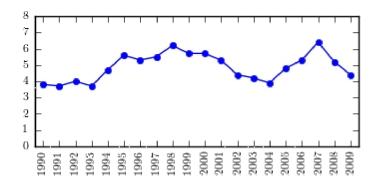
32) The following table presents the rate of population growth of a suburb of Atlanta, Georgia for each of the years 1990 through 2009. Construct a time-series plot of the growth rate.

•••

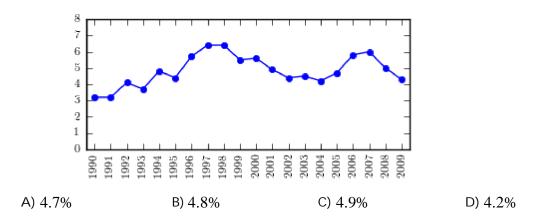
32)



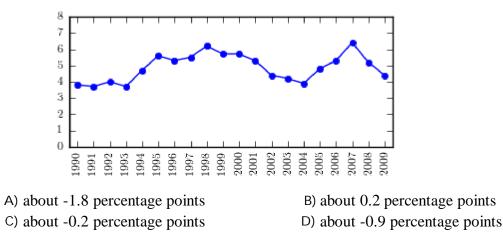
C)



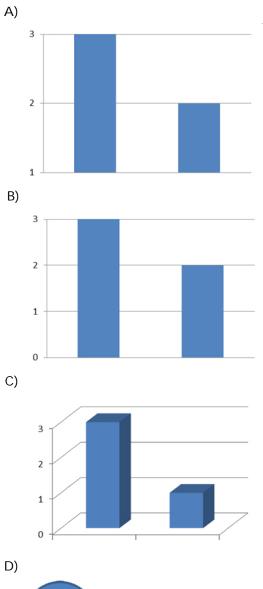
33) The following time-series plot presents the population growth (in percent) of a suburb of33) Atlanta, Georgia for each of the years 1990 through 2009. Estimate the rate of growth in2009.



34) The following time-series plot presents the population growth (in percent) of a suburb of34) Atlanta, Georgia for each of the years 1990 through 2009. Estimate the amount by which the rate of growth changed from 1998 to 2001.

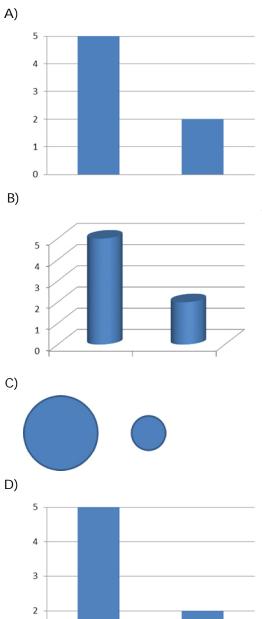


35) Which of the following presents the most honest graphical representation of the ratio "3 to 2"?



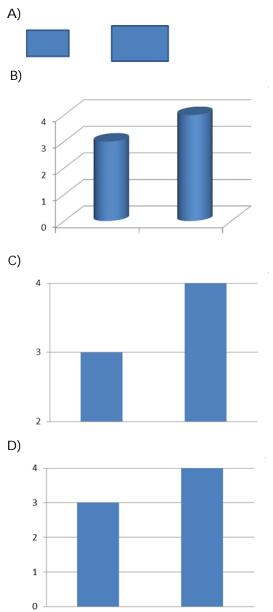


36) Which of the following presents the most honest graphical representation of the ratio "5 to 2"?



1 -

37) Which of the following presents the most honest graphical representation of the ratio"3 to 4"?



Answer Key Testname: UNTITLED2

1) A

2) A 3) A 4) D 5) C 6) C 7) C 8) A 9) B 10) D 11) C 12) A 13) C 14) C 15) C 16) B 17) B 18) A 19) D 20) D 21) C 22) A 23) D 24) C 25) D 26) A 27) D 28) D 29) D 30) D 31) A 32) C 33) D 34) D 35) B 36) A

37) D

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