

LESSON

6-5

Practice C

Frequency Tables and Histograms

During a car trip, Antoine counted the number of red, black, blue, and green cars he passed on the highway. He recorded the results in the box below.

red	black	blue	green	red
blue	red	black	blue	black
red	green	red	red	black

1. Use the data to make a cumulative frequency table. How many cars did Antoine count in all?

2. Which color of car did Antoine count most often?

Number of Cars

Color	Frequency	Cumulative Frequency

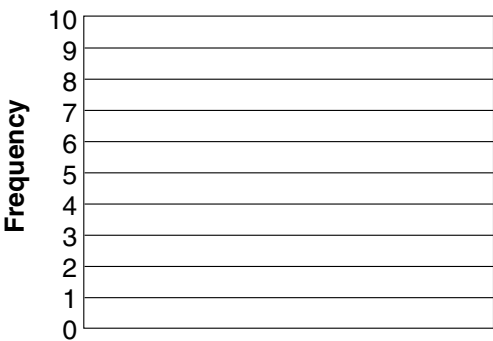
3. Use the data in the box below to make a frequency table with intervals.
4. Use your frequency table from Exercise 3 to make a histogram.
5. To which age group did most of the drivers belong? _____

Ages of Drivers at Truck Stop											
17	28	65	29	34	47	55	27	18	39	42	58
61	33	21	46	52	55	41	48	19	23	25	22

Ages of Drivers at Truck Stop

Age Intervals	Frequency

Ages of Drivers at Truck Stop



LESSON Practice B

6-5 Frequency Tables and Histograms

Mr. Allen said that his students could choose one day a week to not have homework assigned. He recorded their votes in the box below.

Monday	Friday	Thursday	Friday	Wednesday
Friday	Tuesday	Wednesday	Friday	Monday
Tuesday	Monday	Friday	Monday	Friday

1. Make a tally table to organize the data. Which day got the most votes?

Friday

Tally Table for Homework Votes

Mon	
Tues	
Wed	
Thurs	
Fri	

2. Use your tally table from Exercise 1 to make a cumulative frequency table. How many students voted in all?

15 students

Number of Votes

Day	Frequency	Cumulative Frequency
Mon	4	4
Tues	2	6
Wed	2	8
Thurs	1	9
Fri	6	15

3. Use the data in the box below to make a frequency table with intervals.

Class Social Studies Test Scores									
78	95	81	83	75	68	100	73	92	85
59	70	88	92	99	87	75	67	89	84

Possible answer:

Class Social Studies Test Scores					
Scores	51-60	61-70	71-80	81-90	91-100
Frequency	1	3	4	7	5

4. In which range of scores did most of the students' tests fall?

81-90

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LESSON Practice C

6-5 Frequency Tables and Histograms

During a car trip, Antoine counted the number of red, black, blue, and green cars he passed on the highway. He recorded the results in the box below.

red	black	blue	green	red
blue	red	black	blue	black
red	green	red	red	black

1. Use the data to make a cumulative frequency table. How many cars did Antoine count in all?

15 cars

2. Which color of car did Antoine count most often?

red

Number of Cars

Color	Frequency	Cumulative Frequency
red	6	6
black	4	10
blue	3	13
green	2	15

3. Use the data in the box below to make a frequency table with intervals.

4. Use your frequency table from Exercise 3 to make a histogram.

5. To which age group did most of the drivers belong? **16-25**

Ages of Drivers at Truck Stop

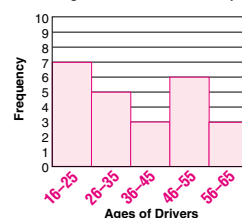
17	28	65	29	34	47	55	27	18	39	42	58
61	33	21	46	52	55	41	48	19	23	25	22

Ages of Drivers at Truck Stop

Age Intervals	Frequency
16-25	7
26-35	5
36-45	3
46-55	6
56-65	3

Possible answers:

Ages of Drivers at Truck Stop



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LESSON Reteach

6-5 Frequency Tables and Histograms

Julie picked the following cards from a deck.



You can make a tally table to organize the data. Make a row for each suit of cards. Then for each card, make a tally mark in the appropriate row.

Julie's Cards

Clubs	Spades	Hearts	Diamonds

1. Make a tally table to organize the data.

Rolls of a Number Cube					
2	3	6	5	1	4
3	3	5	1	6	1

Rolls of a Number Cube					
1	2	3	4	5	6

A frequency table tells the number of times an event, category, or group occurs. The cumulative frequency is the running total of all of the frequencies.

To make a frequency table of Julie's data, make a row for each type of card. Then use the tally table to find the frequency of picking each type of card.

Julie's Cards

Card	Clubs	Spades	Hearts	Diamonds
Frequency	2	3	4	1
Cumulative Frequency	2	5	9	10

2. Make a frequency table for the tally table you made Exercise 1.

Roll of a Number Cube						
Roll	1	2	3	4	5	6
Frequency	4	1	3	2	2	2
Cumulative Frequency	4	5	8	10	12	14

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LESSON Reteach

6-5 Frequency Tables and Histograms (continued)

Sometimes, you can make a frequency table with intervals or a histogram.

Number of Jumping Jacks Completed in 30 Seconds

12	28	24	32	35
31	38	55	43	52
42	49	18	22	15
47	37	19	31	37

A frequency table can organize the data with intervals.

Jumping Jacks

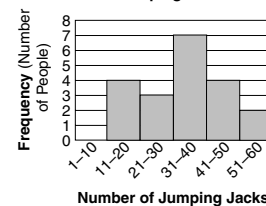
Interval	Frequency
1-10	0
11-20	4
21-30	3
31-40	7
41-50	4
51-60	2

A histogram is a bar graph that shows the number of values that occur within each interval.

You make a histogram the same way you make any other bar graph, except that the bars touch. They do not overlap.

Here is a histogram for the frequency table above.

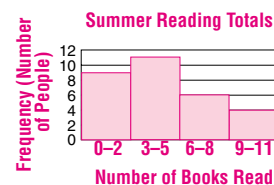
Jumping Jacks



3. Use the data to make a histogram.

Possible answer:

Total Books Read by Participants in Summer Reading Program					
5	3	8	7	6	
2	9	10	1	2	
4	5	7	3	5	
3	1	0	10	4	
3	5	8	2	1	
1	7	0	4	11	



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