

Take out SOL Review Warm-Up #2 from after the test last class. Please place it on your desk.

- A scientist calculated that a river 12 km long contains roughly 123,000,000,000 drops of water. The amount of water droplets can be expressed in scientific notation as –
A. 0.123×10^{13} B. 1.23×10^{14} C. 1.23×10^{12} D. 123×10^{12}
- The fraction $\frac{5}{8}$ is equivalent to –
A. 0.625% B. 0.0625% C. 62.5% D. 625%
- Which list is in order from greatest to least?
A. $\frac{2}{3}, \frac{6}{10}, 6\%, 0.006$ B. $\frac{2}{3}, 6\%, \frac{6}{10}, 0.006$ C. $.006, 6\%, \frac{6}{10}, \frac{2}{3}$ D. $\frac{6}{10}, 6\%, 0.006, \frac{2}{3}$
- Look at the model. Which statement is represented by the model?
A. $\sqrt{256} = 16$ B. $16 \cdot 2 = 32$
C. $\sqrt{16} = 4$ D. $256 \div 2 = 128$
- What is the value of $-27 - (-13)$?
A. -40 B. 14 C. 40 D. -14
- Ginny lost 53 pounds. She gained 12 pounds back and then lost an additional 16 pounds. What integer represents Ginny's change in weight?
A. 57 B. -57 C. -4 D. 28
- Identify each expression that is equivalent to -2.

PEMDAS

$6 - (-12) + 3 = 6 + 12 + 3 = 21$
 $(-12 + 8) \div 2 = (-4) \div 2 = -2$
 $-12 - (-4) + (-3) - (-2) = -12 + 4 - 3 + 2 = -9$
 $5 + (-6) - 4 + 2 = 5 - 6 - 4 + 2 = -3$
 $-4 + 6 - (-1) - 2 = -4 + 6 + 1 - 2 = 1$
 $-6 - (-4) = -6 + 4 = -2$
 $-4 \div 2 = -2$
 $-12 - (-4) + 0 = -8 + 0 = -8$
 $5 + -24 + 2 = -17$
 $-4 + -8 = -12$
 $-4 + -4 = -8$

Histograms

NN#38: Histograms

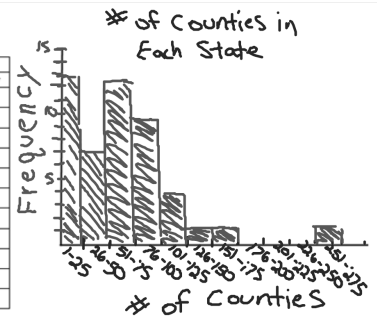
Learning Target: SOL 7.11a,c
The student, given data for a practical situation, will construct and analyze histograms; and compare and contrast histograms with other types of graphs presenting information from the same data set.



Vocabulary	Definition	Example
Frequency	# of times an event occurs	1-25 happens 13 times
Frequency Table	A table that shows data items and the frequency in which they occur.	See below
Interval	Space between two objects, points, or units.	1-25 26-50
Histogram	A bar graph to display numerical data that has been organized into equal intervals.	See Below

Example:

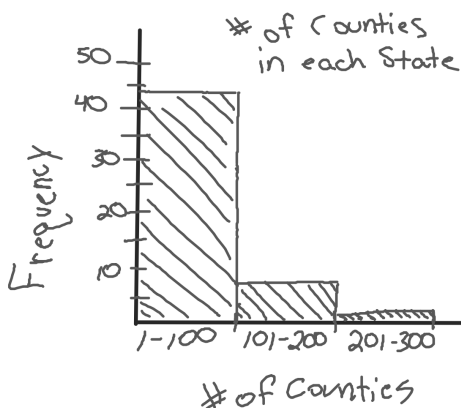
Number of Counties in Each State	Tally	Frequency
Counties		
1 – 25		13
26 – 50		7
51 – 75		13
76 – 100		10
101 – 125		1
126 – 150		1
151 – 175		1
176 – 200		1
201 – 225		1
226 – 250		1
251 – 275		1



THINGS TO REMEMBER:

- There is no space between bars.
- Because the intervals are equal, all of the bars have the same width.
- Intervals with a frequency of 0 have no bar.

Can we use different intervals?



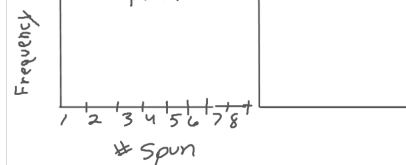
Using Different Intervals

DIRECTIONS: Spin your spinner 20 times. Record your results in the frequency table given below. Then, use the frequency table to create three different histograms with the given intervals.

# Spun	Tally	Frequency
1		
2		
3		
4		
5		
6		
7		
8		

Using an Interval of 1

Spun on a Spinner



Using an Interval of 2

Using an Interval of 4



Histograms Multiple Choice Practice

1. The following data shows prices of meal options at Bob's Burgers. Bob wants to construct a histogram from this graph.

Prices of Meal Options at Bob's Burgers

\$6	\$7	\$7	\$8	\$9
\$10	\$10	\$11	\$11	\$12
\$12	\$13	\$13	\$13	\$13
\$14	\$14	\$14	\$15	\$15
\$15	\$15	\$16	\$16	\$17

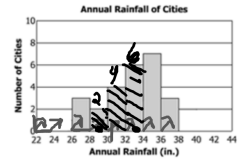
How many meals could belong in the interval $\$10.99 - \13.99 ?

- A) 6 **B) 8** C) 10 D) 13

2. The annual amount of rainfall for 25 cities was recorded and is shown in the histogram below.

How many cities could have an annual rainfall of 28.5 in – 32.5 in?

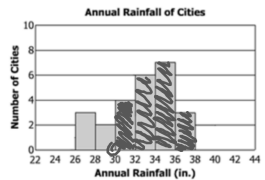
- A) 6 **C) 8**
B) 9 **D) 12**



3. The annual amount of rainfall for 25 cities was recorded and is shown in the histogram below.

How many intervals could represent an annual rainfall of 30 in – 36 in?

- A) 2 C) 3
B) 4 D) 5

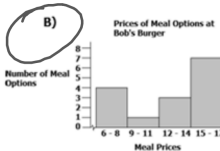


4. The following data shows prices of meal options at Bob's Burgers.

Prices of Meal Options at Bob's Burgers

\$6	\$7	\$9
\$14	\$14	\$15
\$15	\$16	\$17

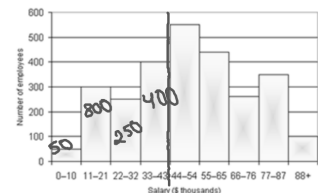
Which histogram correctly displays the information above?



5. The histogram below represents the results of a survey conducted from a local university asking recent graduates the amount of their first year salary.

How many recent graduates make less than 44,000 dollars?

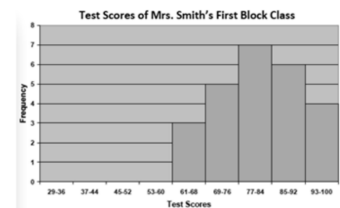
- A) 400 **C) 1,000**
B) 2,700 D) Cannot be determined using the information given



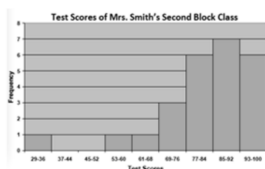
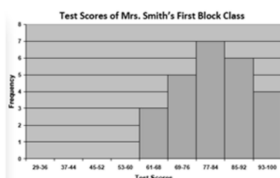
6. The histogram below shows the scores for Mrs. Smith's first block class at Red Rock Middle School.

If an 85 is the lowest score a student can earn to receive a B, how many students received at least a B?

- A) 4 C) 6
B) 10 D) 15



7. The histograms below show the scores for Mrs. Smith's first and second block class at Red Rock Middle School.



Compare the histograms using the following information:

- 69 and above is passing
- 68 or below is failing

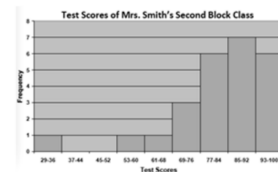
Which of the following statements is true?

- A) The number of students that passed the test is the same in both classes.
B) More students passed in first block than second block.
C) More students passes in the second block than first block.
D) Cannot be determined based on the graphs given.

8. The histogram below shows the scores for Mrs. Smith's second block class at Red Rock Middle School.

How many students scored a 77 on the test?

- A) 0
B) 1
C) 6
D) Cannot be determined



9. Cosmic, Inc. is a software company with 30 employees. The ages of the employees are displayed in the histogram.

How old is the youngest employee?

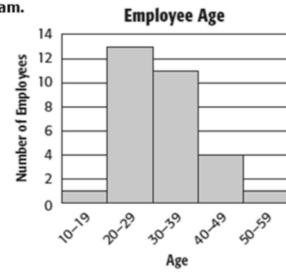
- A) 10
B) 15
C) 19
D) Cannot be determined



10. Cosmic, Inc. is a software company with 30 employees. The ages of the employees are displayed in the histogram.

Which interval has the least number of employees?

- A) 10-19
- B) 50-59
- C) Both A and B
- D) Cannot be determined



Formative Assessment!