Answer Key

Name_____ Date_____
Teacher_____

6th Grade Math (Statistics) Enrichment #12 (Lesson 30-3)

Ready:

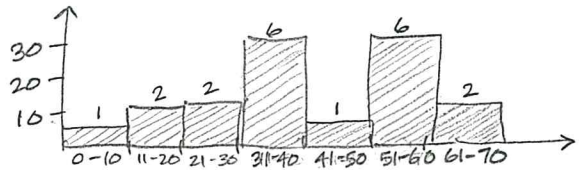
1. Twenty people attended a family reunion. Their ages are listed below.

10, 15, 24, 36, 38, 42, 54, 53, 52, 64, 11, 22, 35, 38, 37, 37, 54, 55, 55, 65 .

Construct a frequency table with a class interval of 10.

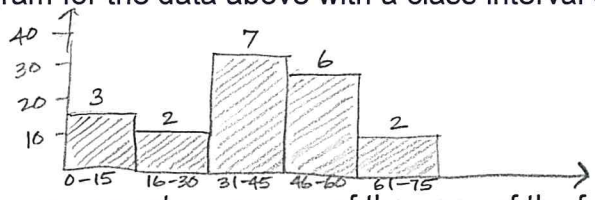
ages	# of times	%
0–10	1	5%
11–20	2	10%
21–30	2	10%
31–40	6	30%
41–50	1	5%
51–60	6	30%
61–70	2	10%

2. Construct a histogram based on the frequency table with a class interval of 10.



3. Construct a frequency table and histogram for the data above with a class interval of 15.

ages	#	%
0–15	3	15%
16–30	2	10%
31–45	7	35%
46–60	6	30%
61–75	2	10%



4. Which histogram do you think gives a more accurate summary of the ages of the family members who attended the family reunion?

The second one looks more symmetrical but the first histogram shows a dip in the ages between 41 and 50 and so it is a more accurate summary.

Set:

5. The formula $C = \frac{5}{9}(F - 32)$ is used to convert degrees Fahrenheit (F) to degrees Celsius (C). Enter the temperature in degrees Celsius (C) equal to 113 degrees Fahrenheit (F).

$C = \frac{5}{9}(113 - 32)$

$= \frac{5}{9}(81) = 45°$

6. Write an inequality that has the set {-4.86, -2.5, 0, 2.74, 4.1} as possible solutions for x. Explain your reasoning. Answers may vary.

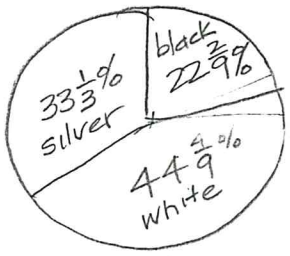
$x > -5$ or $x < 5$

Go:

7. Robert, Andrew and Dan are having a discussion about which color car is the most popular. Robert says white, Andrew says black and Dan says silver. They stood at the intersection of Culver and Michelson for an hour and kept count. The results were: black = 40; silver = 60; white = 80. Show 2 different ways that they could display their results.

Total = 40 + 60 + 80
= 180

cars	#	%
black	40	$22\frac{2}{9}\%$
silver	60	$33\frac{1}{3}\%$
white	80	$44\frac{4}{9}\%$
total	180	100%



8. Mrs. Smith has 12 students in her math class. On a recent test, the class average was 80. When Beth asked for her score, Mrs. Smith could not find it, but she did remember adding Beth's score in the average. She also remembered that Beth had passed. These are the scores of the other students:

65, 65, 70, 70, 80, 85, 85, 90, 90, 90, 100

Tell how Mrs. Smith can figure out the missing score. What is Beth's score?

$$\text{mean} = \frac{65+65+70+70+80+85+85+90+90+90+100+x}{12}$$

$$80 = \frac{890+x}{12}$$

$$1960 = 890 + x$$

$$70 = x$$