

Answer Key

Name _____
Teacher _____

Date _____

6th Grade Math (Statistics) Enrichment #11 (Lesson 30-2)

Ready:

The data below represents the number of stairways in the homes of twenty students. Use this data to answer the following questions:

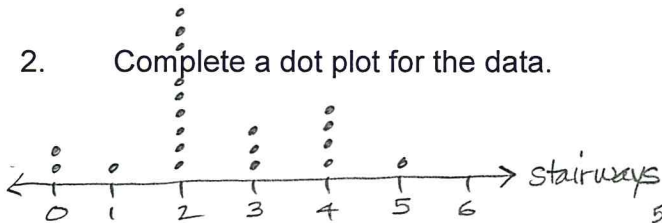
0, 0, 1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 3, 3, 3, 4, 4, 4, 4, 5

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

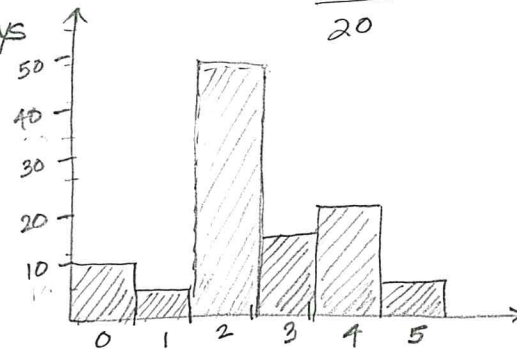
1. Complete a frequency table for the data.

data	frequency	%
0	2	10%
1	1	5%
2	9	45%
3	3	15%
4	4	20%
5	1	5%
	20	

2. Complete a dot plot for the data.



3. Create a histogram for the data.



Set:

4. The equation shown has an unknown number. Enter a fraction that makes the equation true.

$$\frac{2}{3} \div \square = \frac{6}{8}$$

$$\frac{2}{3} \div x = \frac{6}{8}$$

$$\frac{2}{3} = \frac{6}{8} \times$$

$$\frac{16}{18} = x$$

$$x = \frac{8}{9}$$

5. Identify the correct quadrant where each ordered pair is located.

Ordered Pair	1 st Quadrant	2 nd Quadrant	3 rd Quadrant	4 th Quadrant
(-8, 2)		✓		
(-3, -5)			✓	
(4, 2)	✓			
(5, -12)				✓

6. Enter the value of $3^3 \cdot 7^2 - 8 \div 4$.

$$3^3 \cdot 7^2 - 8 \div 4 = 27 \cdot 49 - 2$$

$$= 1323 - 2$$

$$= 1321$$

$$\begin{array}{r} 6 \\ 27 \\ 49 \\ \hline 243 \\ 108 \\ \hline 1323 \end{array}$$

Go:

7. Let's consider again ~~at~~ the table that lists four of the greatest New York Yankees' home run hitters with the number of homeruns each hit while a Yankee.

Babe Ruth		Lou Gehrig		Mickey Mantle		Roger Maris	
Year	Home runs	Year	Home runs	Year	Home runs	Year	Home runs
1920	54	1923	1	1951	13	1960	39
1921	59	1924	0	1952	23	1961	61
1922	35	1925	20	1953	21	1962	33
1923	41	1926	16	1954	27	1963	23
1924	46	1927	47	1955	37	1964	26
1925	25	1928	27	1956	52	1965	8
1926	47	1929	35	1957	34	1966	13
1927	60	1930	41	1958	42		
1928	54	1931	46	1959	31		
1929	46	1932	34	1960	40		
1930	49	1933	32	1961	54		
1931	46	1934	49	1962	30		
1932	41	1935	30	1963	15		
1933	34	1936	49	1964	35		
1934	22	1937	37	1965	19		
		1938	29	1966	23		
		1939	0	1967	22		
				1968	18		

Make a frequency table and histogram for each player. Use the intervals 0-9, 10-19, 20-29, 30-39, 40-49, 50-59, 60-69.

8. Describe the shape of the data for each player. What observations can you make about the four players by looking at the shape?

Babe Ruth

Data	BR	%	LG	%	MM	%	RM	%
0-9	0	0	3	18%	0	0%	1	14%
10-19	0	0	1	6%	4	22%	1	14%
20-29	2	13.3%	3	18%	5	28%	2	29%
30-39	2	13.3%	5	29%	5	28%	2	29%
40-49	7	46.7%	5	29%	2	11%	0	0
50-59	3	20%	0	0	2	11%	0	0
60-69	1	6.6%	0	0	0	0	1	14%