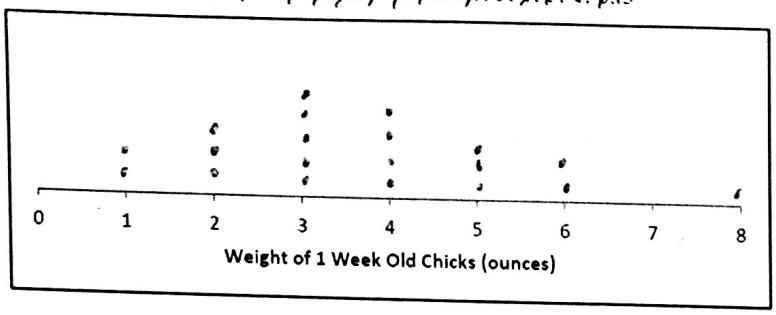
Name: _____
Date: _____
Class: _____

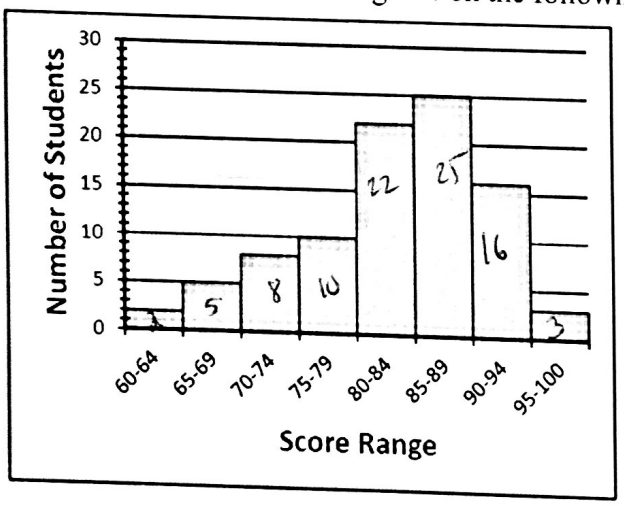
Algebra
Unit 11
HW 11-1

1) Construct a dot plot based on the following data:

2, 1, 3, 4, 2, 2, 3, 2, 3, 3, 4, 4, 3, 5, 3, 3, 4, 5, 6



Base your answers to #2 through #4 on the following histogram:



2) How many students received a grade below a 70?

5 + 2 = (7)

3) How many students scored at least an 80?

22 + 25 + 16 + 3 = 66

4) What percentage of students received a C (a grade in the 70s)?

8 + 10 = (18)

5) If you conducted a survey to find out the favorite color of every student in your grade would that be a qualitative survey or a quantitative survey? Why?

↑

not a counting survey

6) If you purchased a pumpkin from a roadside stand, took it home, carved it and found out it was rotten would it be ~~fair~~ or ~~unfair~~ to conclude that all pumpkins from that stand are rotten? Why?

reasonable non reasonably

not reasonable b/c you only purchased 1

7) If you went outside without a coat on 10 days in a row during February and concluded that if you go outside without a coat on during the month of February you will be cold, would that be ~~fair~~ or ~~unfair~~ conclusion?

reasonable non-reasonable

reasonable, you have a good amount of data

8) Find the mean, median, and mode of the following data:

0, 1, 1, 1, 2, 2, 3, 3, 3, 3, 4, 6

$\frac{29}{12} = 2.4 \rightarrow$ Mean

$\frac{2+3}{2} = 2.5 \rightarrow$ Med

Mode → 3

Median → $\frac{12+1}{2} = \frac{13}{2} = 6.5$ Pl btwn 6Pl & 7Pl

9) The following is a survey of the heights of players on a high school basketball team. It is being used to estimate the average height of a student in the high school. Is this a fair or unfair survey?

69, 70, 72, 72, 74, 74, 74, 75, 76, 76, 76, 77, 77, 82

Unfair → bball players are normally taller than average

10) Find the mean, median, and mode of the following grades on a recent English test. Is there an outlier in the group?

~~25~~, ~~70~~, ~~72~~, ~~72~~, ~~70~~, ~~92~~, ~~90~~, ~~85~~, ~~71~~, ~~90~~, ~~90~~, ~~72~~, ~~100~~, 66, 85, ~~72~~, ~~80~~

median

25, 66, 70, 70, 71, 72, 72, 72, (72), 80, 85, 85, 90, 90, 90, 92, 100

median → $\frac{17+1}{2} = 9$Pl Mode → 72

Mean → $\frac{1302}{17} = 76.6$

25 outlier