## Station \#2 - Review for Statistics Test

1. Answer the following questions based on the histograms:
a. This histogram displays the vertical jump, in inches, of 27 basketball players in an NBA draft.

> Vertical Jumps

i. Describe the shape of the distribution.
ii. Estimate the median and write a sentence describing what the median tells about the data.
iii. Estimate the mean and write a sentence describing what the mean tells about the data.
b. This histogram displays the number of video games that are available for each of 43 different platforms (computer operating systems, console systems, and handhelds). The platform with the largest number of games has 3,762 .
(Source: www.mobygames.com/moby_stats)

## Number of Video Games


i. Describe the shape of the distribution.
ii. Estimate the median and write a sentence describing what the median tells about the data.
iii. Estimate the mean and write a sentence describing what the mean tells about the data.
2. A miniature golf course is collecting data on how difficult their courses are. The manager is keeping track of how many putts it took players to complete the final $18^{\text {th }}$ hole. He organized the data in the frequency table.

| \# of Putts | Frequency |
| :---: | :---: |
| 1 | 5 |
| 2 | 9 |
| 3 | 11 |
| 4 | 6 |
| 5 | 3 |
| 6 | 1 |

a. How many total players did the manager collect data for?
b. Calculate the mean and write a sentence describing what the mean tells about the data.
c. Calculate the median and write a sentence describing what the median tells about the data.
3. Bill surveyed $9^{\text {th }}, 10^{\text {th }}$, and $11^{\text {th }}$ graders about which ice cream flavor they preferred. The results are in the table below.

| Ice Cream <br> Preferences | Vanilla | Chocolate | Strawberry | Mint <br> Chocolate | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $9^{\text {th }}$ Graders | 7 | 12 | 5 | 15 |  |
| $10^{\text {th }}$ Graders | 5 | 11 | 8 | 13 |  |
| $11^{\text {th }}$ Graders | 5 | 14 | 6 | 10 |  |
| Total |  |  |  |  |  |

a. Calculate the relative marginal frequencies for each flavor of ice cream. Use this to write a description of the survey.
b. What is the joint frequency of $9^{\text {th }}$ graders who prefer chocolate?
c. What is the percentage of strawberry lovers who are $10^{\text {th }}$ graders?
d. What is the percentage of $10^{\text {th }}$ graders who prefer strawberry the most?

