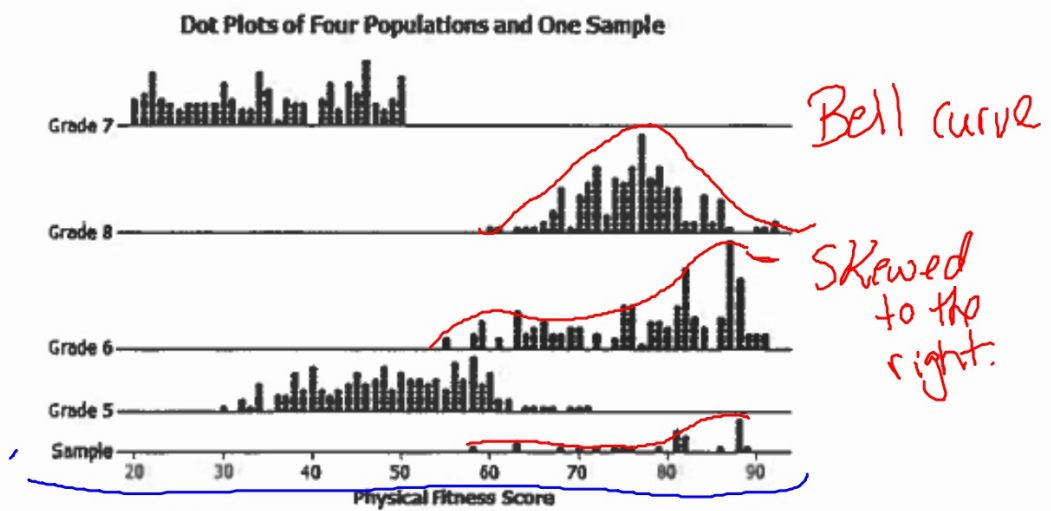


2. Given the following sample of scores on a physical fitness test, from which of the following populations might the sample have been chosen? Explain your reasoning.

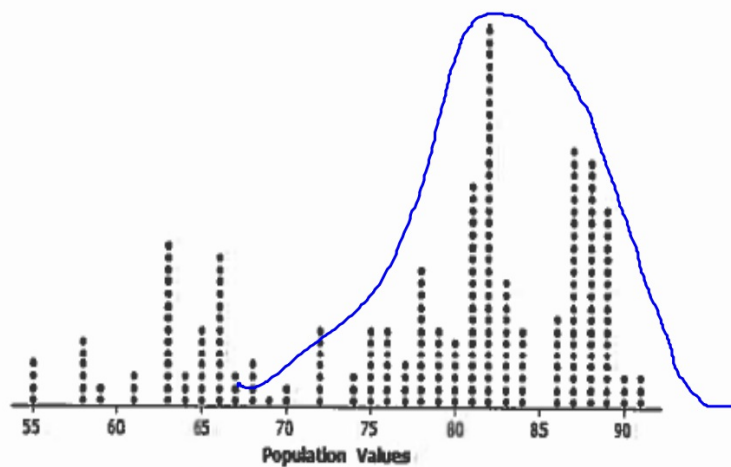


These sample values were not Grades 5 or 7.

Grade 6 looks skewed, so it's more likely the correct answer to represent the sample.

(Sample size is too small.)

3. Consider the distribution below:



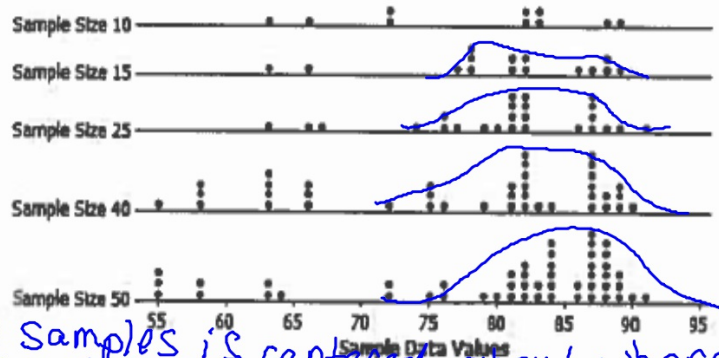
Sample



- What would you expect the distribution of a random sample of size 10 from this population to look like?
- Random samples of different sizes that were selected from the population in part (a) are displayed below. How did your answer to part (a) compare to these samples of size 10?

a) The sample will probably have at least 2 or 3 elements between 80 and 90 and might go as low as 60. Samples vary, so it's hard to tell.

Dot Plots of Five Samples of Different Sizes



c) Each of the samples is centered about where the above population is centered (make mountains).

c. Why is it reasonable to think that these samples could have come from the above population?

d. What do you observe about the sample distributions as the sample size increases?

d) As the sample size increases, the sample distribution more closely resembles the population distribution.

4. Based on your random sample of prices from Exercise 2, answer the following questions:

a. It looks like a lot of the prices end in 9. Do your sample results support that claim? Why or why not?

b. What is the typical price of the items in your sample? Explain how you found the price and why you chose that method.