Figure 3: Histogram of bond prices at default, 1974-1995. (Source: Moody's Investor Services.)

8. Which of the following best describes the data in Figure 3? (Base your answer on the appearance of the histogram. You do not need to do any calculations. Select just one statement below and complete the one you select.)

   (a) The mean is greater than the median because _____

   (b) The median is greater than the mean because _____

   (c) The mean and median are roughly equal because _____

9. One proposal that has received little attention from Major League Baseball is to pay pitchers according to the following rule: each pitcher receives a base salary of $4.25 million, *minus* $0.25 million times his earned run average (ERA). (A lower ERA is associated with better performance.) If this rule were adopted, what would be the correlation between a pitcher's earnings and ERA? (Assume that the ERA cannot exceed 17, so this rule never results in negative earnings. You may also assume a standard deviation of 1.2 for ERA.)

10. Using the data in Figure 4, answer both (a) and (b) below, providing a numerical value for each.

    (a) The mean of the data in the histogram is _____

    (b) The median of the data in the histogram is _____

11. Cluster Ψ had exams in Finance and Marketing last week. All 60 students in the cluster took both exams. The results were as follows:

    ○ Finance: mean = 25, standard deviation = 2

    ○ Marketing: mean = 75, standard deviation = 12

    ○ Correlation between score in Finance and same student's score in Marketing = 0.84

    Mary, a student in Cluster Ψ, scored a 30 in Finance and a 90 in Marketing. We are interested in comparing her performance on the two exams relative to the rest of the class. In particular, we would like to make a statement about which of her scores ranked higher compared to the other scores on the same exam. Select *one* of the choices below and complete the statement you select.