1. Explain why each of the following *is* or *is not* a variable. For those which *are not* variables, use one (1) sentence to explain why. For those which are variables, classify the variable as qualitative or quantitative and state the level of measurement. If a variable is quantitative, provide appropriate units of measure and state if the variable is continuous or discrete.

(a) bills in your wallet

(b) the amount of money in your wallet

(c) the number of bills in your wallet

(d) type of shoe

(e) pages in *Fundamental Statistics* by Michael Sullivan, III

(f) the cost for the DVD's that you purchased within the past two months

(g) the cholesterol in your blood

(h) the amount of cholesterol in your blood

(i) the types of cholesterol in your blood

(j) the gasoline in the gas tank of your car

(k) the amount of gasoline in the gas tank of a car

(l) FSC grades

(m) the number of hairs on your head

(n) hairs on your head

2. Classify the following variables as qualitative or quantitative If the variable is quantitative, provide appropriate units of measure and state if the variable is continuous or discrete. State the level of measurement for each.

(a) age of aircraft

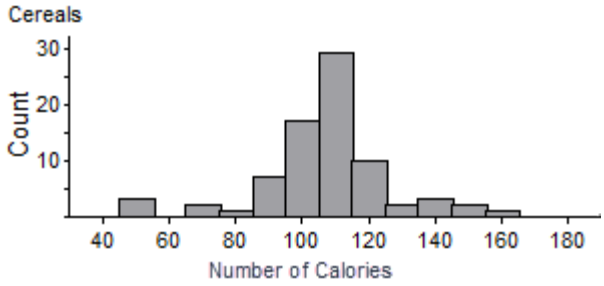
(b) aircraft type

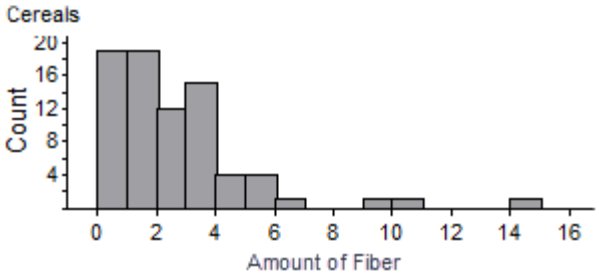
(c) SAT score

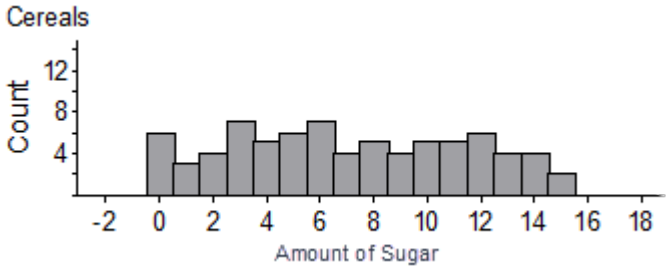
(d) FSU tuition

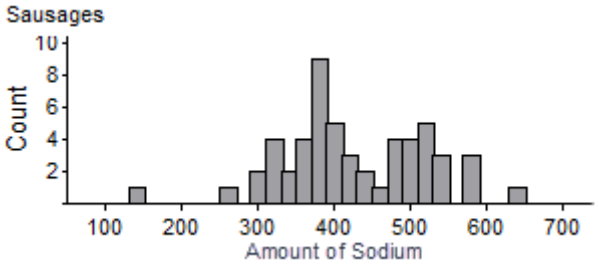
(e) gas mileage for city driving

3. They say that breakfast is the most important meal of the day. For an article that you are writing for *Prevention Magazine*, you analyze the nutritional content for a variety of hot and cold cereals producing the following graphs. Since many choose sausages as a breakfast option, you decide to examine their sodium content as well. You perform your analysis relative to the serving size for each.









(a) Classify the distribution for the number of calories in the cereals being analyzed.

(b) Classify the distribution for the amount of fiber in the cereals being analyzed.

(c) Classify the distribution for the amount of sugar in the cereals being analyzed.

(d) Classify the distribution for the amount of sodium in the sausages being analyzed.