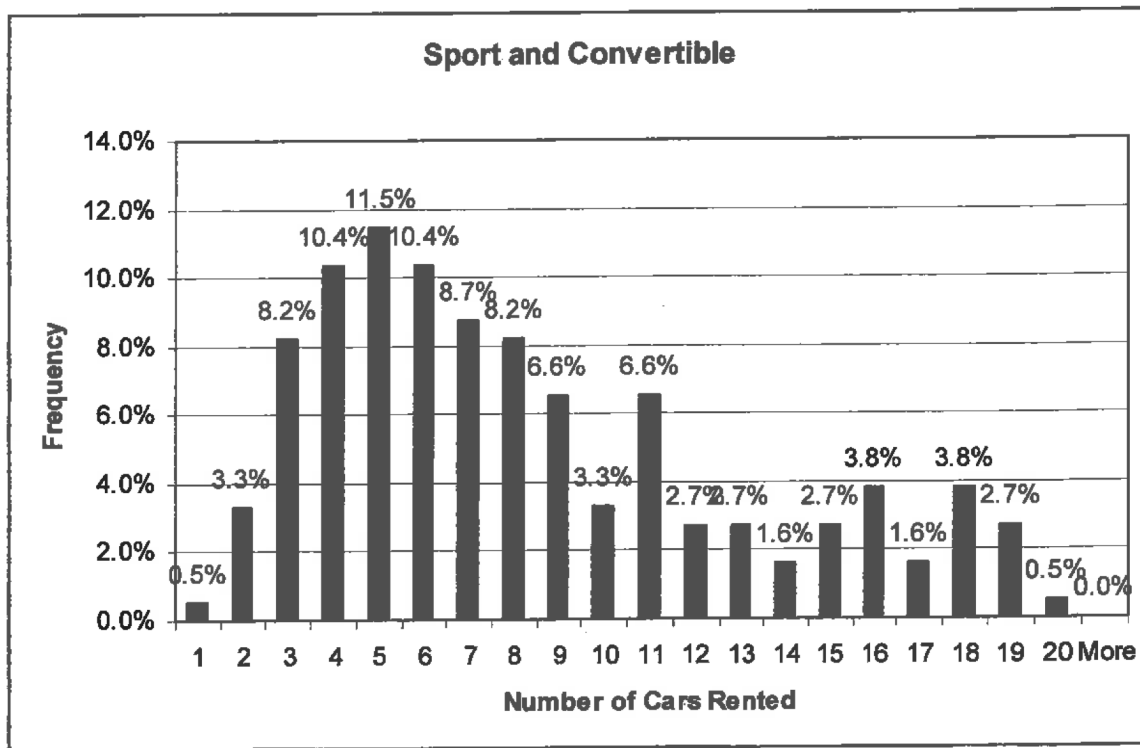


The histogram for SPORT & CONVERTIBLE should look like this:



The histogram shows “bins” for the level of demand each day during the six-month data collection period and the percentage of times that that level of demand was achieved. For example, the bar for six cars shows that demand was six cars 104 per cent of time (that is, 19 days in the 183 day data collection period). Your previous analysis on break even should give the result that this type of car must be rented about 3 days per month or  $3/30 = 10\%$  of the time to break even. Total profit will be maximized by finding car number  $n$  such that the  $n^{\text{th}}$  car is rented at 10 per cent of the time. This works because, if the  $n^{\text{th}}$  car is rented 10% of the time, car  $n-1$ ,  $n-2$ ,...1 are rented at least that many times.