## Quiz 6

Show all your work to recieve full credit. Use the tables to answer questions $1 \& 2$.

1. Over the last 10 days a bicycle shop recorded the number of bikes they sold each day, which numbered between zero and four. The table below shows the relative frequency of the number of bicycles sold over the last 10 days. (5 pts. each)
(a) What is the sample mean of the number of bicycles sold over the last 10 days?
(b) How many bicycles should the store expect to sell over the next three days?

| Number sold | Relative frequency |
| :---: | :---: |
| 0 | .1 |
| 1 | .1 |
| 2 | .3 |
| 3 | .2 |
| 4 | .3 |

2. If $X$ is the random variable given in the table below, what is the probability that $X^{2}$ is at most 4 ?

| $k$ | $\operatorname{Pr}(X=k)$ |
| :---: | :---: |
| -1 | .1 |
| 0 | .2 |
| 1 | .3 |
| 2 | .1 |
| 3 | .3 |

