| Name: |
| :--- |
| PIN: |

MATH 1342
Quiz 4.3
(1) Calculate the mean and variance"by hand":

| $x$ | 2 | 3 | 4 | 5 | 6 | 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $p(x)$ | 0.2 | 0.1 | 0.15 | 0.2 | 0.15 | 0.2 |

(2) Calculate the mean and standard deviation using the 1-Var Stats in the calculator:

| $x$ | 3 | 5 | 8 | 9 | 11 | 15 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $p(x)$ | 0.2 | 0.1 | 0.15 | 0.2 | 0.15 | 0.2 |

(3) On a symmetric, mound shaped probability distribution, the mean is 42.8 and the standard deviation is 7.6. Construct the interval, centered on the mean, where a randomly selected sample is $95 \%$ likely to have a value in that interval.

