(0.5 points) 1. Let X be the number of successes in $n = 300$ independent trials where the probability of success on each trial is $p = 0.6$. Find

(a) $P(0 \leq X \leq 175)$ by using the **normal approximation** to the binomial.

(b) $P(0 \leq X \leq 175)$ by using the **binomcdf function** on the TI.

(0.5 points) 2. The heights of trees are approximately normal. If the **population mean** is 2.10 m with a **population standard deviation** of 0.30 m, find the probability that

(a) **one** tree measured at random has a height over 2.20 m. Normal distribution.)

(b) 36 trees in a random sample have a **sample mean** over 2.20 m.

(0.25 points) 3. $\overline{x}$ is 20 and the margin of error, E, is 3.65. Find the confidence interval.

(0.25 points) 4. There are 18 successes in 40 trials. Find the margin of error for a 90% confidence interval for population proportion, p.

(0.5 points) 5. Find (a) z(0.06) using a TI function.

(b) t(0.06, 23) using the TI solver or invT.

(2 points, total.)