

Warm-up:

1. Describe when to use normal distribution and when to use t-distribution. When would you not be able to use either?
2. Find the critical value,  $t_c$ , for  $c = 0.90$  and  $n = 18$ .
3. Find the margin of error,  $E$ , for  $c = 0.98$ ,  $n = 21$ , and  $s = 1.5$ .
4. When 350 high school students were surveyed, 124 said they take the bus. Find a point estimate for  $p$ , the population proportion of students who take the bus.
5. A pollster wishes to estimate the proportion of U.S. voters who favor free education. How large a sample is needed in order to be 90% confident that the sample proportion will not differ from the true proportion by more than 4%?