- I. Estimating with " \bar{x} " for μ when σ is known, uses the standard normal distribution (z-scores)
- II. Estimating with " \overline{x} " for μ when σ is unknown, uses the t-distribution (t-scores) Table 6

III. t-distribution (p.375):

bell-shaped distribution that is symmetric about its mean which is zero, and where the entire area between the curve and the horizontal axis is one (but σ is unknown)...

- (1) As sample size "n" increases the graph comes ever closer to the standard normal distribution
- (2) degrees of freedom: d.f. = n-1 (adjustment for "s")
- (3) t-score: $t = (\overline{x} \mu) \div (s \div \sqrt{n})$
- (4) margin of Error: $E = t_c \times s \div \sqrt{n}$

IV. Examples (pp.382-384): #4,12ab,16b,18

HW: pp.382-384 / #1,3,5,7,11-17(odd) Read pp.387-395 (section 7.3)