

Confidence Intervals

7.4

Finding Critical T Values

For the problems below, find the appropriate critical value $t_{\alpha/2}$ given the sample size and confidence level:

- For $n = 12$ and a confidence level of 80%.
- For $n = 13$ and a confidence level of 99%.
- For $n = 17$ and a confidence level of 90%
- For $n = 9$ and a confidence level of 95%.
- For $n = 5$ and a confidence level of 98 %.

Answers:

- $t_{\alpha/2} = 1.363$
- $t_{\alpha/2} = 3.055$
- $t_{\alpha/2} = 1.746$
- $t_{\alpha/2} = 2.306$
- $t_{\alpha/2} = 3.747$