

Study Guide for Chap 02

1. Reading: Sections 2.2-2.6 (up to p104).
2. Table 2.3 in p71 is due to inexact answers of old calculators. It will not happen in modern computing software/hardware. Forget about it.
3. Memorize typical examples of 'limit does not exist' and discontinuity.
4. Pay attention to variants of $\lim_{\theta \rightarrow 0} \sin \theta / \theta$ and related examples.
5. Study the precise definitions on page 77, p84, p87, p93 and p104. Find an example for each definition and verify with the $\varepsilon - \delta$ argument.
6. Study how the $\varepsilon - \delta$ argument can be used to examine statements like Example 6, 7 in section 2.3 and Theorem 10 in section 2.5.
7. Study Intermediate Value Theorem and its application.