Section 2.5: Limits at Infinity

MATH 130: Calculus I

Due: Friday, February 15, 2019 at 12:20pm   Name (Print): ⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯

After reading Section 2.5 (pages 91-100 in the text), respond to the following questions **on this handout**. Be sure to staple your pages together before turning it in. **You must answer all parts to all questions to earn full credit!!!** See the salmon homework guidelines handout for details. You are encouraged to take additional notes wherever you are keeping your class notes.

Response Section

1. State the definition of a horizontal asymptote from page 92.

2. How many horizontal asymptotes can a function have (the most and least)? (Think about the definition, i.e. where they come from!) Explain briefly in a full sentence or two.

3. Is it possible to cross a horizontal asymptote? If so, how many times? If not, why not? Use full sentences to respond. Check out Example 1b for some ideas!

4. Write down Theorem 2.7 parts a-c.

5. Apply Theorem 2.7 to answer Exercise 26 on page 100. Explain the connection to Theorem 2.7 as part of your solution.

Questions/Overview Section

6. Write down at least two questions you have on the reading. OR if you have NO questions, do exercise 30 in Section 2.5 (page 100). Check out Example 5 and show all your work for a full solution. See the salmon homework guidelines handout for details.

Reflection Section

7. Write **two or three** sentences reflecting on the process of your recent work in the course. See the salmon homework guidelines handout for details.

Time Section

8. How much time did you spend on this reading assignment? _____