

Things to Cover

- Fall Semester
 - In-Class Work
 - Example
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- Spring Semester
 - Homework
 - Example
 - Pros & Cons
- Future

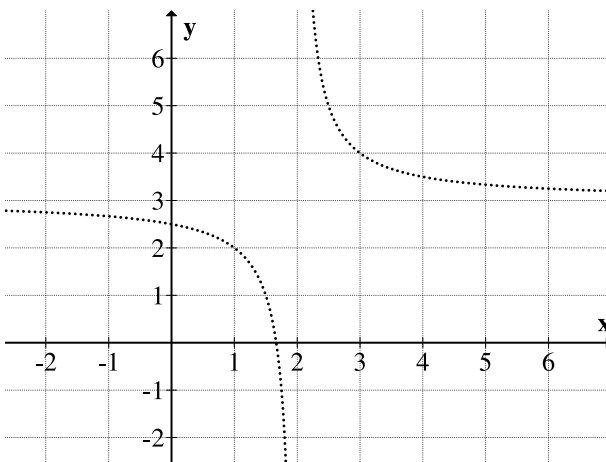
Fall Semester: In-Class Work

- Lecture-based
- Due at end of class
- Returned during following class (before homework is due)

Intent: Students will have an easy reference when attempting homework and reviewing for exams. Students will be more actively involved in class.

Fall Semester: Example

1. Use the graph below to answer the following questions.



The line $x = k$ is a **vertical asymptote** of the graph of f if $f(x) \rightarrow \infty$ or $f(x) \rightarrow -\infty$, as x approaches k from either the left or the right.

- (a) How many vertical asymptotes are there?
- (b) Estimate each vertical asymptote.
- (c) Write the domain of f in set notation.

Fall Semester: Pros

- Students seem more involved during class
- Students ask 'better' questions
- Feedback on attempted examples before homework is due

Fall Semester: Cons

- Students request time to 'absorb' before attempting questions
- Student notes become (more) disorganized
- Some students have trouble taking notes and filling in the worksheet

Spring Semester: Study Sheet

- Book-based
- Due with homework
- Returned with homework (before exam)

Intent: Students should complete each study sheet before attempting the homework, so that concepts become more clear. Students can also use this as a reference and for exam review.

Spring Semester: Example

Study Sheet for Chapter 4 Section 5 Day 1

1. Define a rational function. How are rational functions similar to rational numbers?
2. What is a vertical asymptote? How can you find vertical asymptotes?
3. What is a horizontal asymptote? What are the rules for finding horizontal asymptotes?

Spring Semester: Pros

- Students use the book as a better resource
- Students use the sheets as a reference
- Sheets are kept with homework, so more organized

Spring Semester: Cons

- Many students skip the study sheet altogether or wait until after homework is done
- Students think homework plus study sheet is too much work
- Students see it as more work, not more help

Future Worksheets

- Change style and questions to better reflect what they should know
- Include examples for them to complete as groups
- Create slides that will incorporate worksheets with lectures