## MA 109: October 18

Rational Functions: End Behavior
Start of Class
Instructor Information
Name:
Email:

Office Hours:

Warm-up Questions

## Notes

End Behavior of Rational Functions: Same 3 Steps
Step 1:

Step 2:

Step 3:

Three Cases for Step 3:

Example: Determine the end behavior of the function $f(x)=\frac{3 x^{4}+x^{2}-3 x+7}{5 x^{7}-x^{3}+9 x-1}$. If it has a horizontal asymptote, write its equation.

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Example: Determine the end behavior of the function $f(x)=\frac{3 x^{4}+x^{2}-3 x+7}{-x^{3}+9 x-1}$. If it has a horizontal asymptote, write its equation.

## End of Class

Write a summary of what you learned today:

What questions do you have about the material from today?

What do you need to do between now and the next class meeting?

