

Basic Information

This assignment is due on Gradescope by **1:30 PM on Thursday, October 29**.

Make sure you understand MHC [honor code](#) and have carefully read and understood the additional information on the [class syllabus](#). I am happy to discuss any questions or concerns you have!

A component of this class is helping you understand *why* the math you use works the way it does. To that end, make sure you show all your work as you will be graded on the *process* you use, not just your final answer. And if a question asks you to explain *why* something is true, be sure to answer that part of the question in complete sentences.

Homework will be graded for correctness, and I will point out where mistakes or errors are made. Each homework will be graded *Excellent*, *Satisfactory*, or *Unsatisfactory*. The [course rubric](#) explains more about the distinctions of these categories.

Turn-In Problems

1.6: 24

3.3: 4, 34

3.5: 2, 8, 12, 24, 30

#9. Write the following rational function as one simple fraction.

$$f(x) = \frac{x+3}{x^2-1} + \frac{x-4}{x+1}$$

#10. Write the following rational function as one simple fraction.

$$f(x) = \frac{\frac{2x}{x^2-4}}{\frac{3x^2+1}{3x}}$$

#11. Simplify the following rational function by cancelling any common terms.

$$f(x) = \frac{x^2 - x - 6}{x^2 + 6x + 8}$$

Additional Problems (to do on your own, not to turn in)

1.6: 23

3.3: 3, 33

3.5: 3, 7, 11, 21, 31