

## Section 7.5: Partial Fractions

### MATH 131: Calculus II, Section 2

Name (Print): \_\_\_\_\_

Due: Wednesday, October 24, 2018 at the beginning of class

After reading Section 7.5 (pages 541-548 in the text), respond to the following questions **on this handout**. Be sure to staple your pages together before turning it in if they are not double sided. **You must answer all parts to all questions to earn full credit!!! Also, use FULL SENTENCES to answer questions that require words.** See the salmon homework guidelines handout for details.

#### Response Section

1. Give an example of a function that can be integrated using partial fractions, and then another example of a function that cannot. In general, to what kinds of functions can the method of partial fractions be applied?

2. For each part below, give an example of a function with the noted feature **and identify the feature within the function**. Give an example of a function that has:

(a) a simple linear factor

(b) a repeated linear factor

(c) a simple irreducible quadratic factor

(d) a repeated irreducible quadratic factor

3. What is the first step we must do in order to integrate  $\frac{6x^2 - 3x + 5}{7x - 4}$ ? Explain why (though you need not actually do it).

4. Copy the Procedure for Partial Fractions with Simple Linear Factors on page 542.

### Questions/Overview Section

5. Write down any **questions** you have on the reading. Be as specific as possible! See the salmon homework guidelines handout for details.

### Reflection Section

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

### Time Section

7. How much time did you spend on this reading assignment? \_\_\_\_\_