BC Calculus Integration Techniques/ DE's HW List

Date of Monday	Day 1	Day 2	Day3	Notes
Nov 27th A Week	Int by substitution (7-2)	Int by parts (7-3)	Partial fractions (7-5)	
Dec 4th B week	Improper Integrals (9-4)	Separable DE's	Review	
Dec 11th A Week	Review	Big Quiz	Review	
Dec 18th Finals Week	FINALS	ARE	FUN	

We are going to look at tricks for finding antiderivatives and one way to differential equations. We will finish up DE ideas after the Christmas break.

Chapter Goals:

- Solve definite and indefinite integrals using integration techniques such as u-du substitution, parts, and partial fractions
- Use limits to evaluate improper definite integrals
- Solve separable differential equations

- 7-2 # 5, 25, 27, 31, 33, 39, 47, 49, 57, 65, 67, 79, 81
- 7-3 # 1, 3, 5, 9, 17, 19, 38, 39, 51, 52, 53
- 7-5 # 5, 7, 9, 11, 13, 21, 43, 47

a) $\int \frac{-4x-5}{x^2+4x+4}dx$ b) $\int \frac{5x^2+9x-6}{x^3+x^2+4x+4}dx$

c) $\int \frac{4x^2+7x-1}{(x^2+5)(x-3)}dx$ d) $\int \frac{5x^2+5x+24}{(x+2)(x^2+7)}dx$

- 9-4 # 5, 9, 13, 17, 25, 27, 29, 37, 41, 59
- 7-1 # 3, 7, 11, 17, 25 – 28 all, 77 7-3 # 11, 15 7-4 # 1 – 9 odd