AP: Homework
12/4-12/8

due: Tuesday: read pp. 274-275

Wednesday: read pp. 276-279, 299-301

1. pp. 282-283 / #7, 14, 35, 48, 56
2. pg. 303 / #29, 31, 32, 39
3. Find the area of the region bounded by the curve $y = x^3 - 3x^2 + 4$ and the x-axis from $x = -1$ to $x = 2$.

Thursday: read pp. 294-296

pp. 302-304 /#2, 3, 10, 11, 45, 60, 62

Friday:

pp. 303-304 / #57, 58

Monday: read pp. 285-286

1. pp. 290-291 / #1, 2, 3, 5
2. Let $f(x)$ be the function defined by $f(x) = \begin{cases} x^2, & x \leq 0 \\ x^2 + x, & x > 0 \end{cases}$, find $\int_{-2}^{1} f(x)dx$.
3. If $\int_a^b f(x)dx = 5$ and $\int_a^b g(x)dx = -1$, which of the following must be true?
   - I. $\int_a^b [f(x) + g(x)]dx = 4$
   - II. $f(x) > g(x)$ for $a \leq x \leq b$
   - III. $\int_a^b [f(x) \cdot g(x)]dx = -5$
4. If $\int_2^8 f(x)dx = -10$ and $\int_2^4 f(x)dx = 6$, find the value of $\int_8^4 f(x)dx$.
5. Let f be a continuous function on [1,4]. If $5 \leq f(x) \leq 9$, then the least possible value of $\int_1^4 f(x)dx$ is ____ and thee greatest possible value of $\int_1^4 f(x)dx$ is ____.