

4.4 #45-55 odd; 75-91 odd

4.5 #5-25 odd; 33-61 odd

5.2 #1-37 odd; 49-55 odd; 63, 65

5.4 #91-117 odd

5.5 #71-82 all

5.7 #1-45 odd

Ch 5 Review pp.393-394 #15-22, 47-54,65-66, 77-82

TEST #2 - Thurs. 12/15

$$\int \frac{dx}{x^2 + 5x + 7}$$

$$= \int \frac{dx}{\left(x + \frac{5}{2}\right)^2 + \left(\frac{\sqrt{3}}{2}\right)^2}$$

$$= \frac{2}{\sqrt{3}} \arctan \frac{x + 5/2}{\sqrt{3}/2} + C$$

$$\left(\frac{5}{2}\right)^2 = \frac{25}{4}$$

$$x^2 + 5x + \frac{25}{4} - \frac{25}{4} + \frac{28}{4} + \frac{3}{4}$$

$$f(x) = x^3, \quad [0, 3]$$

$$\frac{1}{3-0} \int_0^3 x^3 dx = C^3$$

$$\frac{1}{4} x^4 \Big|_0^3 = 3C^3$$

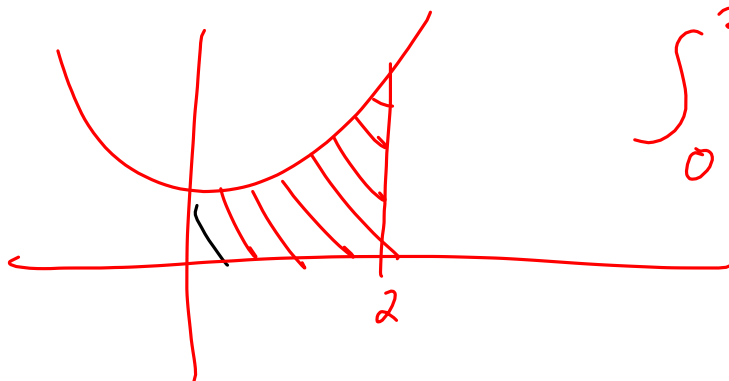
$$\frac{81}{4} - 0 = 3C^3$$

$$\frac{27}{4} = C^3$$

$$C = \sqrt[3]{\frac{27}{4}}$$

$$= \frac{3}{\sqrt[3]{4}}$$

$$y = 5x^2 + 2, \quad x=0, \quad x=2, \quad y=0$$



$$\int_0^2 (5x^2 + 2) dx$$