Thurs., Jan. 20

Sec. 4.9 pp. 327-329
28, 31, 33, 36, 41, 42, 73, 75,
a & b at right

Sec. 5.5 pp. 391-393
16, 17, 19, 20, 21, 27

a) $\int \csc x (\sin x + \cot x)\, dx$

b) $\int \left(\dfrac{2}{x} + 3e^x \right) dx$

Mon., Jan. 24

Sec. 5.5 p. 391
33, 34, 37, 38 *(See back for all answers.)*

Handout p. 372
13, 24, 31, 33, 35, 36, 37, 38, 41, 42

Wed., Jan. 26

Integration of Exponential, Logarithmic &
Inverse Trig Functions Handout

Fri., Jan. 28

Sec. 5.1 p. 343
23, 26, 27

Sec. 5.2 p. 359
33-42

Sec. 5.3 p. 374
42, 43, 45, 61, 63, 65, 68

Sec. 5.5 p. 391
40, 43, 45, 49, 51

Tues., Feb. 1

Sec. 5.4 pp. 381-382
22, 25, 35, 38
Evaluate using CAS: 47, 53

Review Integration

Journal Due

Thurs., Feb. 3

Integration Test

**Math Matters
Due Next Class**

28. $12m^5 - \dfrac{50}{3}m^3 + C$

36. $2t^6 + \dfrac{1}{t} + C$

42. $\sec\theta - \tan\theta + C$

a. $1 - \csc x + C$

b. $2\ln|x| + 3e^x + C$

26. Left ≈ 3.840; Right ≈ 4.279

34. 11

36. 22

38. -1

40. $-2\pi - 1$

42. a) -24   b) 24   c) 36   d) -9

42. $\pi - 2$

68. $-2xe^x + 8xe^{2x}$ OR $2xe^x\left(4e^x - 1\right)$

22. $\dfrac{7}{3}$

38. $f_{ave} = \dfrac{1}{2}$; $x \approx 0.690107$ and $x \approx 2.45149$

16. $\dfrac{2}{3}\sqrt{(3x^2 + x)^3} + C$

20. $\dfrac{\left(\sqrt{x}+1\right)^5}{5} + C$

33. $\dfrac{2}{3}(x - 4)^{\frac{3}{2}} + 8(x - 4)^{\frac{1}{2}} + C$

34. $\dfrac{-1}{y+1} + \dfrac{1}{\left(y+1\right)^2} - \dfrac{1}{3\left(y+1\right)^3} + C$

37. $\dfrac{3}{28}(2x + 1)^{\frac{7}{3}} - \dfrac{3}{16}(2x + 1)^{\frac{4}{3}} + C$

38. $\dfrac{2\left(3x+2\right)^{\frac{5}{2}}}{45} + \dfrac{2\left(3x+2\right)^{\frac{3}{2}}}{27} + C$

40. $\dfrac{4}{5}$