You must justify your answers to receive full credit.

- 5.4: Q9, 12

- 5.5: Q4, 8, 11

- 5.5: Q14, 17

- 5.4 Q35, 5.5 Q33 (You can use FTC2 on both of these.)

- 5.5 Q41, 42

- 5.6: Q1, 3, 14

- 5.6: Q19, 20

- 5.6: Q39, 40, 43 (Hint: the notation in Q43 means $\int_{e}^{e^2} \frac{1}{t \ln t}\, dt$.)

- 5.7: Q5, 10, 11

1. Estimate the following integrals using Riemann sums with the indicated number of subintervals:

   a) $\int_{3}^{5} \frac{1}{1 + \cos\sqrt{x}}\, dx$, 4 subintervals

   b) $\int_{0.5}^{1.5} f(x)\, dx$, 5 subintervals, where f is given as in the table below:

x	$f(x)$
0.0	1.41
0.1	1.41
0.2	1.40
0.3	1.39
0.4	1.38
0.5	1.37
0.6	1.35
0.7	1.32
0.8	1.30
0.9	1.27
1.0	1.24
1.1	1.20
1.2	1.17
1.3	1.12
1.4	1.08
1.5	1.03
1.6	0.93

— END —