

Assignment 11 (10/24)

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Problem 1

Chapter 5 review: (7, 10, 17, 18, 29, 44).

Problem 2

Note that by chain rule,

$$\frac{d}{dx} \left(\int_a^{u(x)} f(t) dt \right) = f(u(x))u'(x)$$

and

$$\frac{d}{dx} \left(\int_{v(x)}^{u(x)} f(t) dt \right) = f(u(x))u'(x) - f(v(x))v'(x)$$

Now do problems 5.8.(1 – 6, 20, 23, 28, 33, 35, 38).