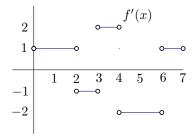
MATH 107-253 Recitation 3

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p. 304 #14: Assume f' is given by the graph in Figure 6.13. Suppose f is continuous and that f(3)=0.

- (a) Sketch a graph of f.
- (b) Find f(0) and f(7).
- (c) Find $\int_0^7 f'(x) dx$ in two different ways.



p. 130 #35: Find an antiderivative F(x) with $F'(x) = f(x) = 2 + 4x + 5x^2$ and F(0) = 0. Is there only one possible solution?

p. 130 #51: Find the indefinite integral of $\int \left(t\sqrt{t} + \frac{1}{t\sqrt{t}}\right) dt$.

p. 130 #59: Evaluate $\int_1^2 \frac{1+y^2}{y} \ dy$ exactly [as in $\ln(3\pi)$], using the Fundamental Theorem, and numerically $[\ln(3\pi)\approx 2.243]$.