

Math 111-002
Assignment # 7

Please remember that the assignment consists of only a sample of the kind of questions you are supposed to be able to do. It is **not** a safe practice to just do the assignment, and that is why there is a list of “suggested practice problems” in the course web page.

1. Evaluate the integral

(a) $\int \frac{x}{x-3} dx$

(b) $\int_0^1 \frac{x-1}{x^2+3x+2} dx$

(c) $\int_0^1 \frac{x-1}{x^2+3x+3} dx$

(d) $\int \frac{1}{x^3-1} dx$

(e) $\int \frac{x^2+x+1}{(x^2+1)^2} dx$

(f) $\int \frac{1}{x(x^2+9)^2} dx$

(g) $\int \frac{x^2+3x-1}{x^3+7x} dx$