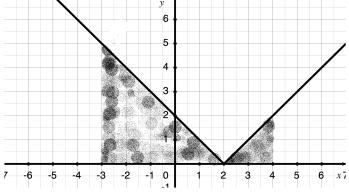
Quiz 1 (AM)

Show all your work. Reasonable supporting work must be shown to earn credit. There are two sides to this quiz.

1. Consider the graph below for the following questions.

(a) [1] Find the rule/expression of the function



(b) [3] (WebHW2 #1) Set up a definite integral that yields the area of the shaded region.

(c) [2] ($\S 5.3~\# 52a$) Compute/find the definite integral that you set up above.

2. [4] (definiteActivity #3) Given $\int_{2}^{4} g(x) dx = 25$, $\int_{2}^{4} x dx = 6$, and $\int_{0}^{2} x dx = 2$, find:

(a)
$$\int_{2}^{4} x + 3g(x) dx$$

(b) $\int_0^4 x \, dx$