

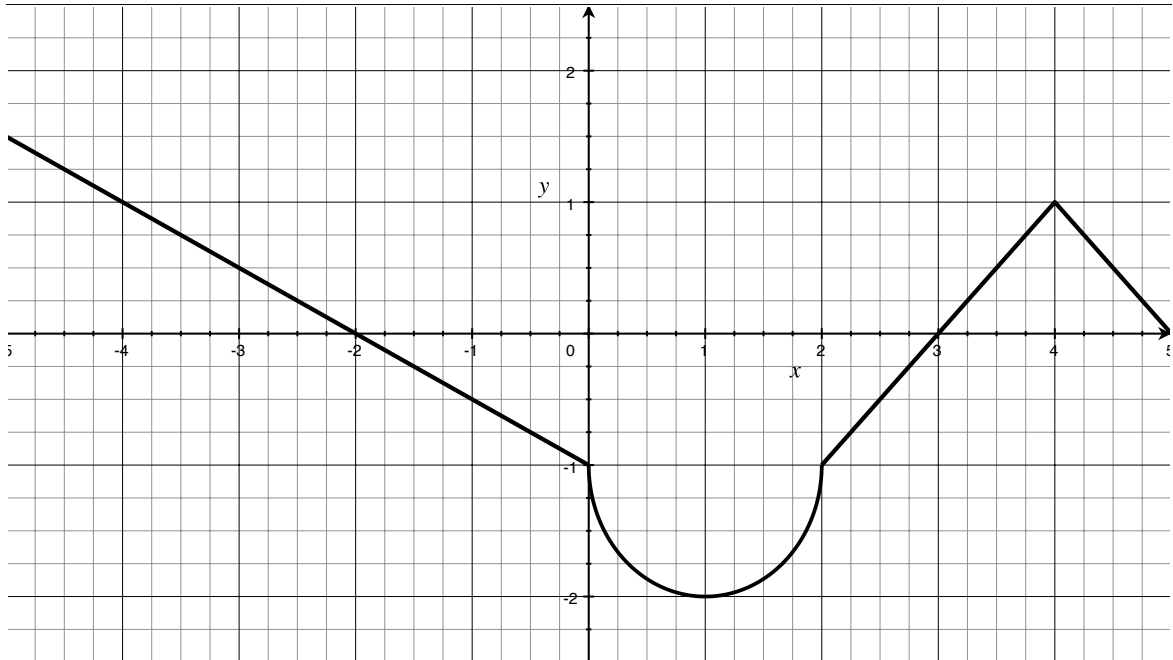
Math 105 Quiz 8

§5.1, 5.2, 5.6

Name:

Show all work for credit.

1. The following graph of $g(x)$ is made up of basic geometric shapes (at times more than one at once). Determine the following.



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

(c) $\int_0^3 g(x) dx$

(b) $\int_{-4}^0 g(x) dx$

(d) $\int_5^3 g(x) dx$

2. Use properties of the integral to find the following given that

$$\int_{-1}^1 f(x) dx = B, \int_0^1 f(x) dx = C, \int_0^1 h(x) dx = D$$

(a) $\int_{-1}^0 f(x) dx$

(b) $\int_0^1 (f(x) + h(x)) dx$

3. Estimate the area under the curve $\ln(x)$ on the interval $[2,4]$ using right-hand and left-hand methods and 4 subintervals.

(a) Draw the graph.

(b) $R_4 =$

(c) $L_4 =$