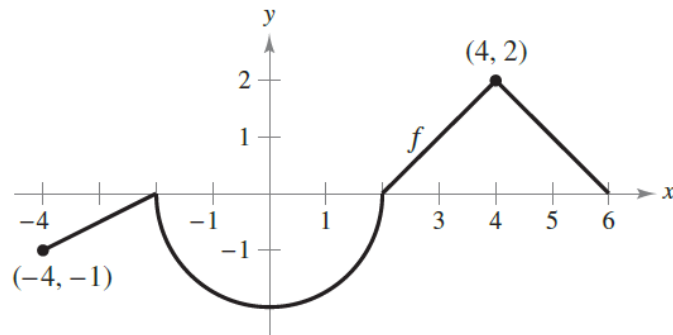


Math 3A: Quiz 4

Directions: Show your work! Any problem with a final answer but no work shown will automatically receive a score of zero.

1. Use the graph of f below to answer the following questions: (



a) $\int_0^2 f(x) dx$

b) $\int_0^6 f(x) dx$

2. Find $g'(x)$.

$$g(x) = \int_{x^3}^{\sin x} t^2 e^t dt$$

3. Water flows from a storage tank at a rate of $(500 - 5t)$ liters per minute. Find the amount of water that flows out of the tank during the first 18 minutes.

4. Evaluate the following integrals:

a) $\int \frac{2x+1}{\sqrt{x+4}} dx$

b) $\int_3^4 4xe^{x^2} dx$