1. (3 points) The graph of \( f(x) \) is shown below. Evaluate \( \int_{-4}^{4} f(x) \, dx \).

2. (3 points) Evaluate the following definite integral. Simplify your answer.

\[
\int_{1}^{5} \frac{1}{2x} \, dx
\]
3. (4 points) Evaluate the following indefinite integrals.

(a) \[ \int \frac{x^4 + 16}{x^2} \, dx \]

(b) \[ \int 12 \csc(2x) \tan x \, dx \]