1. $f(x)$ is the line depicted be the below graph.
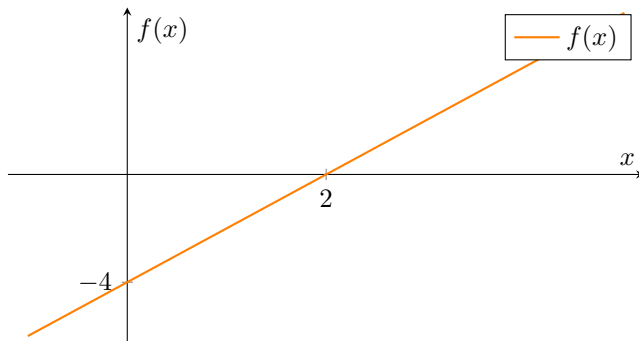
(a) Find $\displaystyle\int_0^6 f(x)dx$

(b) Find $\displaystyle\int_0^t f(x)dx$

(c) Find $\displaystyle\int f(x)dx$

2. Compute the following definite integrals:

(a) $\int_0^{2t} \left(\frac{x^3}{4} + 6 \right) dx$

(b) $\int_a^b c \, dx$

(c) $\int_t^2 \left(e^{3x} - e^{-3x} \right) dx$

3. Garfield rides a bike West for 2 hours. After t hours, Garfield leisurely bikes at $-8t^2 + 16t$ miles per hour.

  (a) How far does Garfield travel?

  (b) If Garfield starts 3 miles North of the Cat Cafe, find his distance from the cafe after t hours.

Do HW 2 and 3.

The End.