

1. Let $f(x) = 2$ and $a = 0$. Then $A_f(x) = \int_0^x 2 \, dt$.

(a) Find $A_f(0)$, $A_f(3)$, $A_f(-3)$, $A_f(4)$

(b) Find a formula for $A_f(x)$. How is A_f related to f ?

2. Let $f(x) = -2x$ and $a = 1$.

(a) Find $A_f(1)$, $A_f(3)$, $A_f(0)$, and $A_f(-1)$

(b) Find a formula for $A_f(x)$. How is A_f related to f ?