1. True or False?

$$\int_2^{10} \frac{dx}{x} = \ln(5).$$

2. True or False?

$$\int_0^\pi \sin(2x)\,dx = 0.$$

The graph of a function f is depicted to the right, and

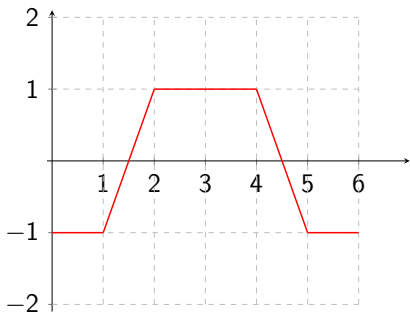$$A(x) = \int_0^x f(t)\, dt.$$

3. For which x does $A(x) = 0$?

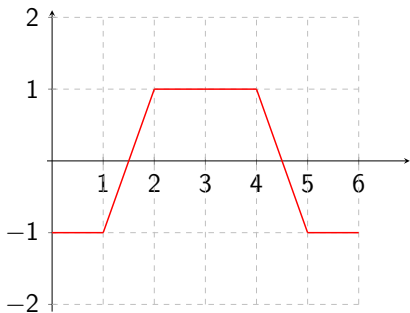(A) $x = 1$

(B) $x = 2$

(C) $x = 3$

(D) None of the above

The graph of a function f is depicted to the right, and

$$A(x) = \int_0^x f(t)\, dt.$$

4. Where does A have a critical point?

(A) $x = 1$

(B) $x = 2$

(C) $x = 3$

(D) None of the above

5.　True or False?

Let f be a differentiable function and

$$A(x) = \int_0^x f(t)\,dt.$$

If $x = c$ is an inflection point of A, then $x = c$ is a critical point of f.