Class Drill 26: Definite Integrals for a Simple Graph

Recall that the informal definition of the definite integral

\[ SA = \int_{x=a}^{x=b} f(x) \, dx \]

was that it is the \textit{signed area} between the graph of \( f(x) \) and the \( x \)-axis, from \( x = a \) to \( x = b \).

For the given graph of \( f(x) \), find value of these definite integrals:

(A) \[ \int_{x=-6}^{x=1} f(x) \, dx \]

(B) \[ \int_{x=-5}^{x=1} f(x) \, dx \]

(C) \[ \int_{x=-4}^{x=1} f(x) \, dx \]

(D) \[ \int_{x=-5}^{x=5} f(x) \, dx \]

(E) \[ \int_{x=5}^{x=5} f(x) \, dx \]

(F) \[ \int_{x=5}^{x=1} f(x) \, dx \]