(27)

\[ y = \sqrt{\frac{2}{gh}} \]

(28)

\[ \int \frac{1}{x} \, dx = \ln|x| + C \]

Inside the range of interest (i.e., for \( x \leq 0 \)), we can find the upper limit of the integral by solving for \( x \) in the equation:

\[ \int_{a}^{x} f(t) \, dt = \int_{a}^{b} f(t) \, dt \]

\[ 0 = \int_{a}^{x} f(t) \, dt \]

Thus, the solution is:

\[ x = \int_{a}^{b} f(t) \, dt \]

\[ 0 \leq x \leq b \]

The diagram shows the area under the curve of the function \( f(x) \) from \( a \) to \( b \), representing the definite integral of the function over that interval.