Use the limit definition to show that the area of the region bounded by the graphs of the equations \( f(x) = 3x + 5 \), \( x = 0 \), \( x = 4 \) and the x-axis is 44 square units.

No credit for the Fundamental Theorem.

\[
\text{Area} = \lim_{n \to \infty} \sum_{i=1}^{n} f(x_i) \Delta x
\]