Problem 10

Recall that \( \cosh bt = (e^{bt} + e^{-bt})/2 \) and \( \sinh bt = (e^{bt} - e^{-bt})/2 \). In each of Problems 7 through 10, find the Laplace transform of the given function; \( a \) and \( b \) are real constants.

\[
f(t) = e^{at} \sinh bt
\]