Example 1. Solve

\[ 5e^{2x} = 7. \]
Example 2. We return to the model of Loyola University Maryland’s tuition presented in Example 1 in Section 1.5. The tuition was $36,510 in fall 2009 and has grown at an annual rate 3.47%.

Using natural logs, find when the tuition is predicted to be $53,000.