A tank storing solar-heated water stands unmolested (no water is added or removed, no heat is added) in a room having a constant temperature of 70 degrees. The tank cools from 150 degrees to 110 degrees in 4 days.

1. What will the temperature be in 4 more days? (Hint: recall that it is the difference in the temperature of the water and the room that has a half-life.)

2. When will it reach 80 degrees?

3. What will the temperature be one day later? (Another hint: recall the formula
\[ Q = Q_0 \left( \frac{1}{2} \right)^{t/h} \]
where \( h \) is the half-life, \( Q_0 \) is the initial amount. This requires a calculator and some common sense as to what to use for \( t \).)