Correct. Use the formula and fill in the known values: $100,000 = 100(100)^{\frac{t}{40}}$

Divide both sides by 100: $1,000 = (100)^{\frac{t}{40}}$

Take logarithms and use the power property: $\log 1,000 = \log (100)^{\frac{t}{40}} = \left(\frac{t}{40}\right)\log 100$

Evaluate the logarithms: $3 = \left(\frac{t}{40}\right)(2)$

Solve for *t*: $t = \frac{3 \cdot 40}{2}$ or $t = 60$.