Intellectual Need Task for Differentiability

A rabbit breeder currently has 10 female rabbits. She controls their breeding so that they all mate with males at the same time, have a litter approximately 1 month later, and then wait an additional 2 months before mating again.

- P(t) is number of rabbits at time t in months
- The size of the population P(t) can be modeled by the formula $R(t) = 10 \times 2^t$, where t is measured in months.

How quickly is the rabbit population growing at *t*=1 and at *t*=2?