Modeling With a Recursive Equation

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Suppose we are in charge of a brim population of a local lake. This population of brim increases itself by 15% each year. We assume 500 are caught each year. Currently there are 1800 brim in the lake.

1. Write a difference/recursive equation for the lake brim population.

2. Determine how many brim will be in the lake after 3 years.

3. As time goes on, will the population die out, increase, or go to a limiting stable ?

4. If we wanted the brim population to remain at 1800, how many fish would we allow to be caught each year?

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