Name: _____   **Student ID:** _____

For a fully discrete whole life insurance issued to (x), you are given:

- The only expenses are 25 at the beginning of the first year and 5 each year thereafter.

- Expenses are payable at the beginning of each year the policyholder is alive.

- $\ddot{a}_x = 12.1$ $\ddot{a}_{x+15} = 8.3$

Calculate the expense reserve at the end of 15 years.