

2.

Kathryn deposits 100 into an account at the beginning of each 4-year period for 40 years. The account credits interest at an annual effective interest rate of  $i$ .

The accumulated amount in the account at the end of 40 years is  $X$ , which is 5 times the accumulated amount in the account at the end of 20 years.

Calculate  $X$ .

(A) 4695

(B) 5070

(C) 5445

(D) 5820

(E) 6195