

284. John approximates values of $\ddot{a}_{80}^{(m)}$ using Woolhouse's formula with three terms. His results are:

$$\ddot{a}_{80}^{(2)} = 8.29340 \text{ and } \ddot{a}_{80}^{(4)} = 8.16715.$$

Calculate $\ddot{a}_{80}^{(12)}$ using Woolhouse's formula with three terms and using the same mortality and interest rate assumptions as John.

- (A) 8.12525
- (B) 8.10415
- (C) 8.08345
- (D) 8.06275
- (E) 8.04135