

## Question #279

Answer: A

$${}_{10}q_{30:40}^2 = \int_0^{10} {}_tP_{30}\mu_{30+t}(1 - {}_tP_{40})dt = \int_0^{10} \frac{1}{70} \frac{t}{60} dt = \frac{50}{70(60)} = 0.0119$$