[4.S01.3] You are given the following times of first claim for five randomly selected auto insurance policies observed from time $t = 0$:

1 2 3 4 5

Calculate the kurtosis of this sample.

$= \frac{\mu_4}{\sigma^4} = \frac{\frac{34}{5}}{4} = 1.7$

A. 0.0 B. 0.5 C. 1.7 D. 3.4 E. 6.8

X	p(x)	x − μ
1	1/5	−2
2	1/5	−1
3	1/5	0
4	1/5	1
5	1/5	2

$\sigma^2 = \frac{1}{5}\left[(-2)^2 + (-1)^2 + 0^2 + 1^2 + 2^2\right]$

$= 2, \quad \sigma^4 = 4$

$\overline{\mu_4} = \frac{1}{5}\left[(-2)^4 + (-1)^4 + \cdots + (2)^4\right]$

$= \frac{34}{5}$