Scribe

4) $0 + k + 2k + 2k + 3k + k^2 + 2k^2 + 2k^3 + k = 1$

$10k^2 + 9k = 1$

$k = \frac{-9 \pm \sqrt{9^2 - 1.(10)(-1)}}{20} \Rightarrow k_1 = \frac{1}{10}$ o ~~$k_2 = -1$~~

$E[x] = \sum_x xP(x) \Rightarrow$

$0.0 + \frac{1}{10} + 2.\frac{2}{10} + 3.\frac{2(1)}{10} + 4.\frac{3}{10} + 5.\left(\frac{1}{10}\right)^2 + \underline{6.2}\left(\frac{1}{10}\right)^2 + 7($

$\mu = \frac{183}{80}$

$E[x^2] = 0^2.0 + \frac{1}{10} + 2^2.\frac{2}{10} + 3^2.\frac{2}{10} + 4^2.\frac{3}{10} + 5^2.(1/10)^2 + 6^2.2\left[\frac{1}{10}\right.$

$+ 7^2\left(7\left(\frac{1}{10}\right)^2 + \frac{1}{10}\right) = \frac{84}{5}$

$V[x] \quad E[x^2] - (E[x])^2 = \frac{84}{5} - \left(\frac{183}{80}\right)^2 = 3,4044$