3. Let n be an integer greater than 1. Define $(x-a)^n = \sum_{k=0}^{n} \mu_k x^k$, where a is an integral constant. It is given that $\dfrac{\mu_2}{\mu_1} = -\dfrac{4}{3}$.

   (a) Chungchung claims that n is an odd number and $a > 0$. Do you agree? Explain your answer.

   (b) Let $(bx-6)^{2n} = \sum_{k=0}^{2n} \lambda_k x^{2n-k}$, where b is an integral constant. If $\lambda_0 = \mu_n$ and $\lambda_1 = -4\mu_{n-1}$, find a, b and n.

(5 marks)