

$$4.13 \quad 2^6 = 64 = 2^{3n} \rightarrow \boxed{n=2}$$

p. 1

$$T_{k+1} = \binom{6}{k} (2x)^{6-k} \left(\frac{1}{4x^2}\right)^k \quad x^0: 0 = 6-k-2k \rightarrow \boxed{k=2}$$

$$T_3 = \binom{6}{2} 2^4 \cdot 4^{-2} = \frac{15 \cdot 2^4}{(2 \cdot 4)^2} = 15$$