1. In the binomial expansion of

$$\left(1+\frac{12n}{5}x\right)^n$$

the coefficients of x^2 and x^3 are equal and non-zero.

(a) Find the possible values of n.

(4)

(b) State, giving a reason, which value of n gives a valid expansion when $x = \frac{1}{2}$

(2)