9 DO NOT USE A CALCULATOR IN THIS QUESTION.

(a) Find the term independent of x in the binomial expansion of $\left(3x-\frac{1}{x}\right)^6$. [2]

(b) In the expansion of $\left(1+\frac{x}{2}\right)^n$ the coefficient of x^4 is half the coefficient of x^6. Find the value of the positive constant n. [6]

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