2. (a) Find, in ascending powers of x, the first four terms of the binomial expansion of

$$(1 - 9x)^{\frac{1}{2}}$$

giving each term in simplest form.

(3)

(b) Give a reason why $x = -\dfrac{2}{9}$ should **not** be used in the expansion to find an approximation to $\sqrt{3}$

(1)