

5 **(a)** Find the first three terms in the expansion of $(1 + px)^{\frac{1}{3}}$ in ascending powers of x . **[3]**

(b) The expansion of $(1 + qx)(1 + px)^{\frac{1}{3}}$ is $1 + x - \frac{2}{9}x^2 + \dots$

Find the possible values of the constants p and q . **[5]**