5 **(a)** Find the first three terms in the expansion of $\left(x^2 - \frac{4}{x^2}\right)^{10}$ in descending powers of x. Give each term in its simplest form. [3]

(b) Hence find the coefficient of x^{16} in the expansion of $\left(x^2 - \frac{4}{x^2}\right)^{10}\left(x^2 + \frac{2}{x^2}\right)^2$. [3]