Let
$$f(x) = \frac{2 + 11x - 10x^2}{(1 + 2x)(1 - 2x)(2 + x)}$$
.

(a) Express $f(x)$ in partial fractions.

- (a) Express f(x) in partial fractions. [5]
- (b) Hence obtain the expansion of f(x) in ascending powers of x, up to and including the term in x^2 . [5]