Let $\mathrm{f}(x) = \dfrac{5x^2 + x + 27}{(2x + 1)(x^2 + 9)}$.

(i) Express $\mathrm{f}(x)$ in partial fractions. [5]

(ii) Hence find $\displaystyle\int_0^4 \mathrm{f}(x)\,\mathrm{d}x$, giving your answer in the form $\ln c$, where c is an integer. [5]