

2 In this question you must show detailed reasoning.

The cubic polynomial $f(x)$ is defined by $f(x) = 5x^3 - 4x^2 + ax - 2$, where a is a constant.

You are given that $(x - 2)$ is a factor of $f(x)$.

(a) Find the value of a . **[2]**

(b) Find all the factors of $f(x)$. **[3]**