1. Consider the polynomial $\frac{25}{3}x^4 + 5x^2 + \frac{15}{2}x + \frac{5}{7} \in \mathbb{Q}[x]$. Write it as a product of a primitive polynomial and an element of \mathbb{Q} .

2. It's possible to write any polynomial in $\mathbb{Q}[x]$ as the product of a primitive polynomial and an element of \mathbb{Q} . Given a polynomial in $\mathbb{Q}[x]$, how would go about writing it as such a product? In particular, how would you find the element of \mathbb{Q} ? Do you think there is only one way to write any given polynomial in $\mathbb{Q}[x]$ as a product of a primitive polynomial and an element of \mathbb{Q} ?