1. Find all of the units in the following rings: $\mathbb{Z}$, $\mathbb{Z}[x]$, $\mathbb{Z}[i]$

2. Let K be a field and R be a ring. Show that every ring homomorphism $\phi : K \to R$ either sends every element in K to 0 or is an injection.

3. Given a group G, what is the definition of a normal subgroup of G?

Check this box if you would like feedback $\square$