(1) Since $x_n \Rightarrow 5$ for $\varepsilon > 0$ $\exists K_1(\varepsilon) > 0 \ni |x_n - 5| < \varepsilon$ if $n > K_1(\varepsilon)$.
Then let $\varepsilon > 0$ then $\exists K_2(\varepsilon) > 0 \ni |x_n^2 - 25| < \varepsilon$ if $n > K_2(\varepsilon)$.
$|x_n^2 - 25| \leq |x_n^2 + 25|$ since x_n^2 is always positive. Then
$|x_n^2 + 25| = |(x_n^2 - 5)^2| = (x_n - 5)^2 < \varepsilon$ $x_n - 5 < \sqrt{\varepsilon}$ and
since $x_n - 5 < \varepsilon$ let $K_2(\varepsilon) = K_1(\varepsilon)$

(2) $x_n \Rightarrow \frac{1}{4}$ $x_n \neq 0$ $\forall n \in \mathbb{N}$ prove $\frac{1}{x_n} \Rightarrow 4$
Since $x_n \Rightarrow \frac{1}{4}$ $\forall \varepsilon > 0$ $\exists K_1(\varepsilon) > 0 \ni |x_n - \frac{1}{4}| < \varepsilon$ if $n > K_1(\varepsilon)$
Then we must show that $\forall \varepsilon > 0$ $\exists K_2(\varepsilon) > 0 \in |\frac{1}{x_n} - 4| < \varepsilon$
if $n > K_2(\varepsilon)$. Let l