1. Evaluate the limits

$a)\ \lim_{x \to -1} \dfrac{8\sqrt{x+5} - 16}{x+1}$

$b)\ \lim_{h \to 0} \dfrac{\sin(x+h)\cos(x+h) - \sin x \cos x}{h}$

2. Evaluate the limit below

$$\lim_{x \to 0} \frac{1 - \cos(4x)}{(x + 1)\ln(x + 1) - x}$$