1) A Norman window has the shape of a rectangle surmounted by a semi-circle. If the perimeter of the window is 30 feet, express the area of the window as a function of the width $x$ of the window. Explain your reasoning.

2) Give a detailed explanation of how to compute:

$$\lim_{x \to 5} \frac{x^2 - 4x - 5}{x - 5}$$