1. Sketch the graph of the function $f(x) = \begin{cases} 2, & \text{if } x \le -2 \\ -\sqrt{4-x^2}, & \text{if } -2 < x < 2 \\ 2-x, & \text{if } x \ge 2 \end{cases}$

and write down the domain and range. Discuss the continuity of $f(x)$ at $x = -2$ and $x = 2$.