5. (a) ...
$$\forall x_1, x_2 \in \mathbb{R}, x_1 \le x_2 \implies f(x_1) \ge f(x_2)$$
  
(b) ... $\exists x_1, x_2 \in \mathbb{R}, x_1 \le x_2 \land f(x_1) < f(x_2)$