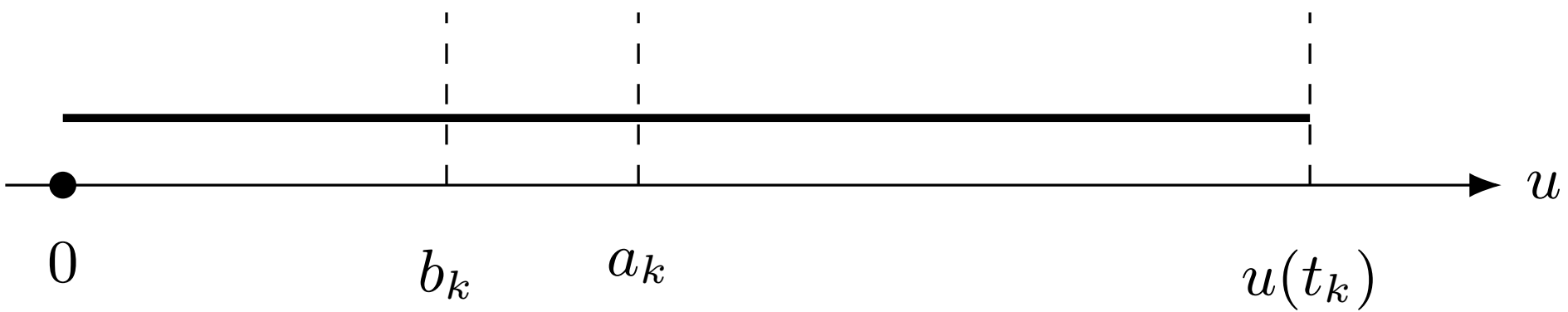
$$\sin(1/a_k) = 1, \qquad \sin(1/b_k) = -1$$

$$0 < b_k < a_k < u(t_k)$$



$$u([a, t_k]) \supseteq [0, u(t_k)]$$