1\$ if

$$T_{t^*} \geq 4$$

$$T_{t^*} \in [3, 4]$$

$$T_{t^*} \in [1, 2]$$

$$T_{t^*} \in [0, 1]$$

$$T_{t^*} < 0$$

$$T_{t^*} = [0, 1]$$

$$T_{t^*} = [0, 1]$$