

points) 10) Circuits Electric in Dynamics Nonlinear

points) 3) instabilities and states Stationary A. Part

(0.4 pt) **A.1**

$$R_{\text{on}} =$$

$$R_{\text{off}} =$$

$$I_0 =$$

$$R_{\text{int}} =$$

(1 pt) **A.2**

: $R = 3.00 \Omega$ for states stationary of numbers Possible

: $R = 1.00 \Omega$ for states stationary of numbers Possible

(0.6 pt) **A.3**

$$I_{\text{stationary}} =$$

$$V_{\text{stationary}} =$$

(1 pt) **A.4**

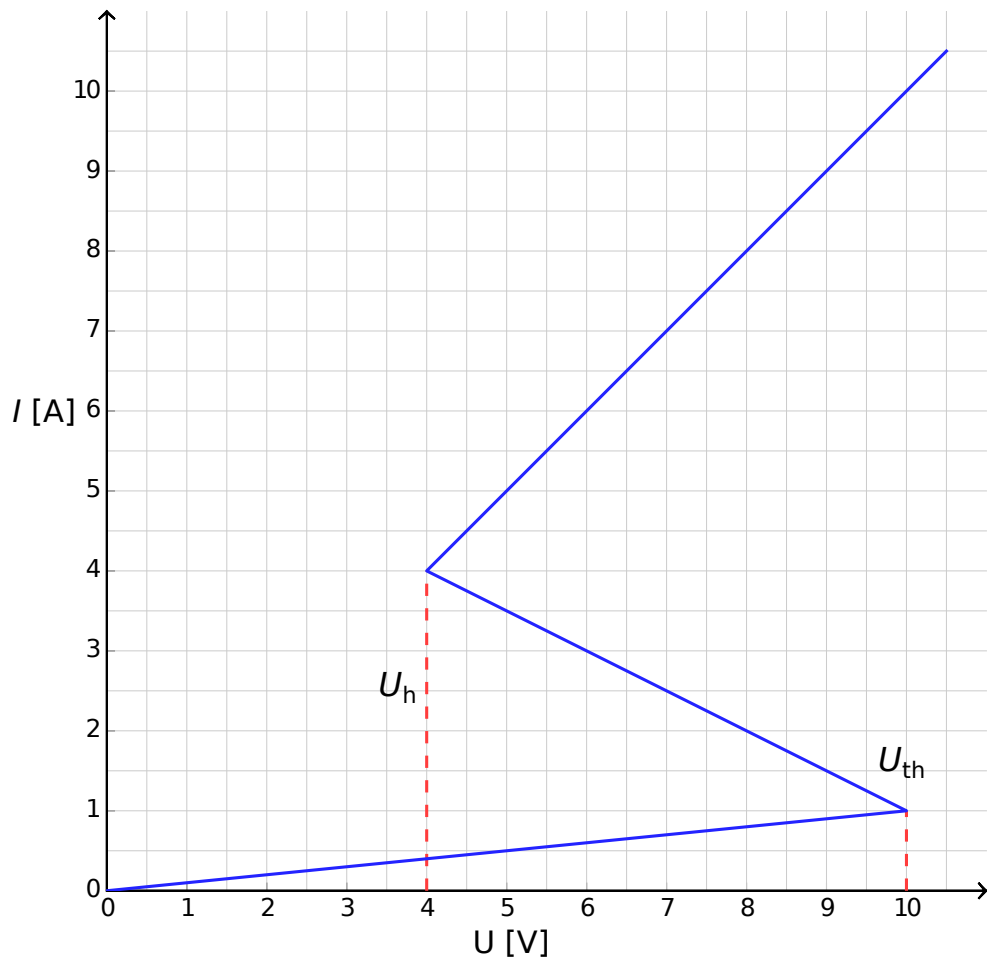
: $I(t = 0) > I_{\text{stationary}}$ for Behaviour

: $I(t = 0) < I_{\text{stationary}}$ for Behaviour

unstable? stable? state: stationary the Is

points) 5) transmitter radio physics: in elements non-linear Bistable B. Part

(1.8 pt) B.1



Justification:

(1.9 pt) **B.2**

t_1 = of Formula

t_1 = of value Numerical

t_2 = of Formula

t_2 = of value Numerical

T = of value Numerical

(0.7 pt) **B.3**

$P \approx$

(0.6 pt) **B.4**

$s =$

points) 2) neuristor biology: in elements non-linear Bistable C. Part

(1.2 pt) **C.1**

$\tau > \tau_{crit}$ for Sketch $\tau < \tau_{crit}$ for Sketch

(0.6 pt) **C.2**

τ_{crit} = of Formula

τ_{crit} = of value Numerical

(0.2 pt) **C.3**

No Yes neuristor? a circuit the Is