Question 1 (10 points)
R=1 kΩ, and \( V_{D0} = 0.7 \) V 
(a) Find the transfer function \( (V_o \text{ for all } V_i) \) for the following circuit:

\[ \text{Diagram of the circuit with diodes.} \]

(b) Sketch the transfer function.
Indicate the values of \( V_i \) or \( V_o \) at any points where the slope is discontinuous.

\[ \text{Graph showing } V_o \text{ vs. } V_i. \]
Question 2 (10 points)

R=1kΩ, V₅=9 V, and Vᵦₒ=0.7 V

Find the current, i, labeled in the circuit below:
Question 3 (10 points)

$R_1 = 2\, k\Omega$, $R_2 = 2\, k\Omega$, $V_{DO} = 0.7\, V$, and $V_Z = 5\, V$

(a) Find the transfer function for the circuit below:

(b) Sketch the transfer function.

Indicate the values of $V_i$ or $V_o$ at any points where the slope is discontinuous.
Question 1 (10 points)

R=1 kΩ, and \( V_{D0} = 0.7 \) V

(a) Find the transfer function \( (v_o \text{ for all possible } v_i) \) for the following circuit:

(b) Sketch the transfer function.

Indicate the values of \( V_i \) or \( V_o \) at any points where the slope is discontinuous.
Question 2 (10 points)

R=1kΩ, V₆=6 V, and Vᵟₒ=0.7 V

Find the current, i, labeled in the circuit below:
Question 3 (10 points)

R₁=3kΩ, R₂=1kΩ, V_{DO}=0.7 V, and V₂=4 V

(a) Find the transfer function for the circuit below:

(b) Sketch the transfer function.

Indicate the values of Vᵢ or Vₒ at any points where the slope is discontinuous.