Day 6
Transistors
What is $V_1$?
Question 1

What current is flowing through the diode?
Transistor Man!

From H&H
Transistor Man!
Better Analogy
Transistors
Transistors

Never assume pin assignments, always look at the datasheet!

2N3904 NPN Transistor

C-E Voltage: 40V
C-B Voltage: 60V
Collector Current: 200mA
(max values)
Does this work?

Simple dimmer

5 V

$R_c = 330$
Switch
Question 2

What is $V_c$?

![Circuit Diagram]

$15\,V$

$R_c = 100$

$5\,V$

$R_B = 1k$

$V_c$
Final Question

What is $V_c$?

[Diagram showing a transistor circuit with $15\,V$, $5.6\,V$, $R_c = 1k$, and $R_E = 1k$.]