Post Lab:

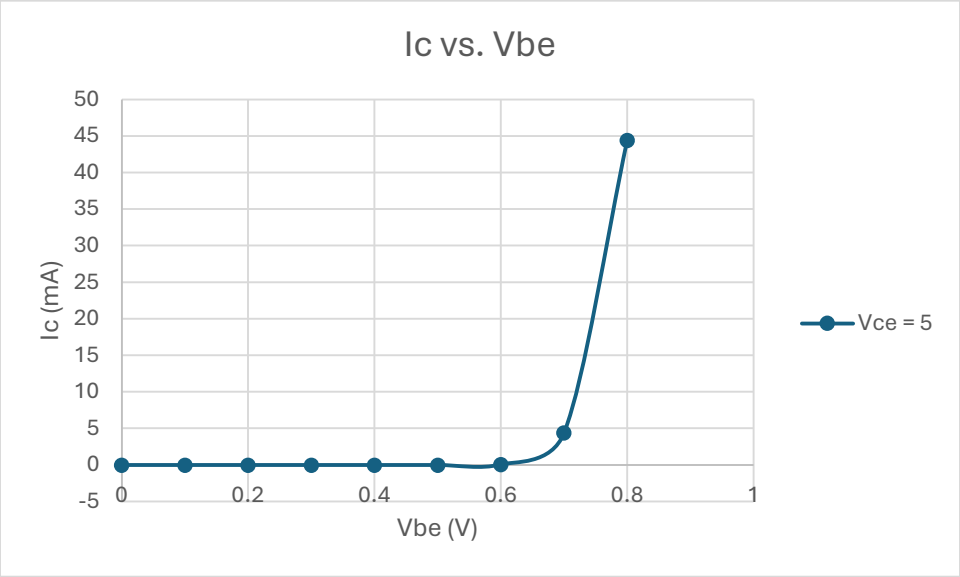
Ic vs Vbe

Beta = Ic/Ib = 0.00441519/1.56361E-05 =282.37

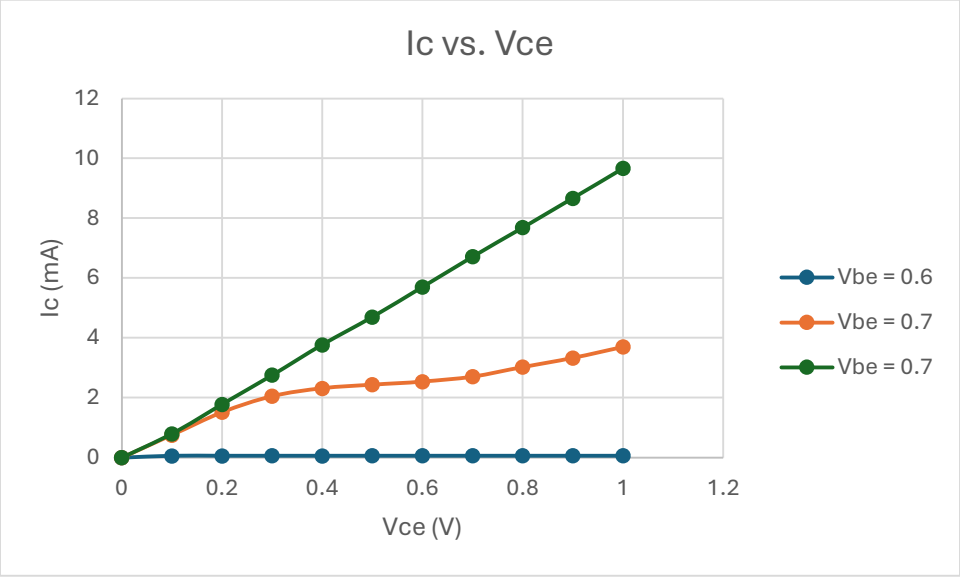
This is on target with the specified beta of 250 at 25 C

At what value of VBE does the current turn on?

Ic turns on when Vbe is around 0.7 volts.

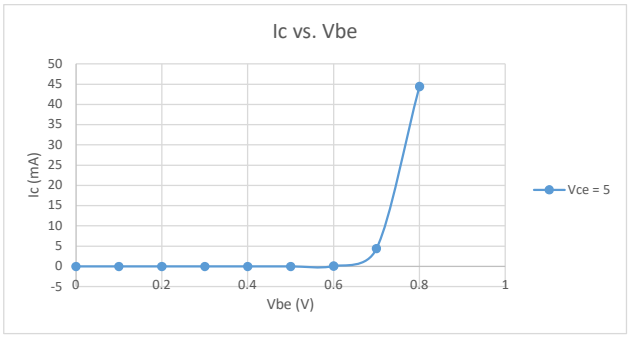


Ic vs Vce



Ic vs Vbe Vce (volts) 5

Vbe (V)	Vc (mV)	Vb (mV)	Ic		
0	0		0	Resistor C (	98.75
0.1	0		0	Resistor C	100
0.2	0		0	Resistor B (	98.17
0.3	0		0	Resistor B	100
0.4	0.006		6.08E-05		
0.5	0.147		0.001489		
0.6	7.457		0.075514	Ib	1.5636E-05
0.7	436	1.535	4.41519	Ic	0.00441519
0.8	4387		44.42532	beta	282.370808



Ic vs Vce Multiplier: 1000

Vbe (V)	Vce (V)	Vc (mV)	Ic (a)
0.6	0	0	0
0.6	0.1	5.767	0.0584
0.6	0.2	5.768	0.05841
0.6	0.3	5.987	0.060628
0.6	0.4	5.865	0.059392
0.6	0.5	6.003	0.06079
0.6	0.6	6.156	0.062339
0.6	0.7	6.248	0.063271
0.6	0.8	6.3	0.063797
0.6	0.9	6.3	0.063797
0.6	1	6.3	0.063797
0.7	0	0	0
0.7	0.1	74.3	0.752405
0.7	0.2	149.7	1.515949
0.7	0.3	202.5	2.050633
0.7	0.4	228.5	2.313924
0.7	0.5	240.9	2.439494
0.7	0.6	250.6	2.537722
0.7	0.7	267.3	2.706835
0.7	0.8	298.8	3.025823
0.7	0.9	328.7	3.328608
0.7	1	365.4	3.700253
0.8	0	0	0
0.8	0.1	78.5	0.794937
0.8	0.2	175.6	1.778228
0.8	0.3	272.4	2.758481
0.8	0.4	372.5	3.772152
0.8	0.5	464.2	4.700759
0.8	0.6	563.4	5.705316
0.8	0.7	663.3	6.716962
0.8	0.8	759.4	7.690127
0.8	0.9	856.1	8.669367
0.8	1	954.8	9.668861