	A	B	C	D	E
1	Aidan Chin				
2	45215				
3	ECE 202 E2 Part B				
4					
5					
6					
7					
8		tmin (seconds)	A1 (Volts)	A (Volts)	a (Volts)
9		0	10	10	10
10		tmax (seconds)	A2 (Volts)	B (Volts/Second)	b (Volts)
11		= 50/1000	-5	-5000	4
12		N (steps)	s1 (Hz)	alpha2 (Hz)	alpha3 (Hz)
13		400	-500	400	150
14		dt (step size)	s2 (Hz)		w (rad/s)
15		= (B11-B9)/B13	-300		450
16					
17	\/ to compute v(t)	\/ to plot	voltage		
18	time (seconds)	time (ms)	overdamped	critically damped	underdamped
19	= B9	= A19*1000	= $C$9*EXP($C$13*A19) + $C$11*EXP($C$15*A19)	= $D$9*EXP(-$D$13*A19) + $D$11*A19*EXP(-$D$13*A19)	= $E$9*EXP(-$E$13*A19)*COS($E$15*A19) + $E$11*EXP(-$E$13*A19)*SIN($E$15*A19)
20	= A19+$B$15	= A20*1000	= $C$9*EXP($C$13*A20) + $C$11*EXP($C$15*A20)	= $D$9*EXP(-$D$13*A20) + $D$11*A20*EXP(-$D$13*A20)	= $E$9*EXP(-$E$13*A20)*COS($E$15*A20) + $E$11*EXP(-$E$13*A20)*SIN($E$15*A20)
21	= A20+$B$15	= A21*1000	= $C$9*EXP($C$13*A21) + $C$11*EXP($C$15*A21)	= $D$9*EXP(-$D$13*A21) + $D$11*A21*EXP(-$D$13*A21)	= $E$9*EXP(-$E$13*A21)*COS($E$15*A21) + $E$11*EXP(-$E$13*A21)*SIN($E$15*A21)
22	= A21+$B$15	= A22*1000	= $C$9*EXP($C$13*A22) + $C$11*EXP($C$15*A22)	= $D$9*EXP(-$D$13*A22) + $D$11*A22*EXP(-$D$13*A22)	= $E$9*EXP(-$E$13*A22)*COS($E$15*A22) + $E$11*EXP(-$E$13*A22)*SIN($E$15*A22)
23	= A22+$B$15	= A23*1000	= $C$9*EXP($C$13*A23) + $C$11*EXP($C$15*A23)	= $D$9*EXP(-$D$13*A23) + $D$11*A23*EXP(-$D$13*A23)	= $E$9*EXP(-$E$13*A23)*COS($E$15*A23) + $E$11*EXP(-$E$13*A23)*SIN($E$15*A23)
24	= A23+$B$15	= A24*1000	= $C$9*EXP($C$13*A24) + $C$11*EXP($C$15*A24)	= $D$9*EXP(-$D$13*A24) + $D$11*A24*EXP(-$D$13*A24)	= $E$9*EXP(-$E$13*A24)*COS($E$15*A24) + $E$11*EXP(-$E$13*A24)*SIN($E$15*A24)