

θ		$r = \frac{3}{1 + 0.75 \cos \theta}$ (ellipse)	$r = \frac{8}{1 + 2 \cos \theta}$ (hyperbola)
(degrees)	(radians)		
0	0	1.7	2.7
10	0.174533	1.7	2.7
20	0.349066	1.8	2.8
30	0.523599	1.8	2.9
40	0.698132	1.9	3.2
50	0.872665	2.0	3.5
60	1.047198	2.2	4.0
70	1.22173	2.4	4.8
80	1.396263	2.7	5.9
90	1.570796	3.0	8.0
100	1.745329	3.4	12.3
110	1.919862	4.0	25.3
120	2.094395	4.8	
130	2.268928	5.8	-28.0
140	2.443461	7.1	-15.0
150	2.617994	8.6	-10.9
160	2.792527	10.2	-9.1
170	2.96706	11.5	-8.3
180	3.141593	12.0	-8.0
190	3.316126	11.5	-8.3
200	3.490659	10.2	-9.1
210	3.665191	8.6	-10.9
220	3.839724	7.1	-15.0
230	4.014257	5.8	-28.0
240	4.18879	4.8	
250	4.363323	4.0	25.3
260	4.537856	3.4	12.3
270	4.712389	3.0	8.0
280	4.886922	2.7	5.9
290	5.061455	2.4	4.8
300	5.235988	2.2	4.0
310	5.410521	2.0	3.5
320	5.585054	1.9	3.2
330	5.759587	1.8	2.9
340	5.934119	1.8	2.8
350	6.108652	1.7	2.7
360	6.283185	1.7	2.7

