Tables for Problem 5

X = Pi				
δ	Given expression (part b)	My expression (part b)	Taylor w ξ=x (part c)	Taylor w ξ=x+δ (part c)
1.000000e-16	0.000000e+00	-1.224647e-32	-7.246468e-33	-7.246468e-33
1.000000e-15	0.000000e+00	3.216245e-31	3.775353e-31	3.775353e-31
1.000000e-14	0.000000e+00	4.762517e-29	4.877535e-29	4 . 877535e-29
1.000000e-13	0.000000e+00	5.005962e-27	4.987754e-27	4.987754e-27
1.000000e-12	0.000000e+00	4.999220e-25	4.998775e-25	4.998775e-25
1.000000e-11	0.000000e+00	4.999878e-23	4.999878e-23	4.999878e-23
1.000000e-10	0.000000e+00	4.999988e-21	4.999988e-21	4.999988e-21
1.000000e-09	0.000000e+00	4.999999e-19	4.999999e-19	4.999999e-19
1.000000e-08	0.000000e+00	5.000000e-17	5.000000e-17	5.000000e-17
1.000000e-07	4.996004e-15	5.000000e-15	5.000000e-15	5.000000e-15
1.000000e-06	5.000445e-13	5.000000e-13	5.000000e-13	5.000000e-13
1.000000e-05	5.000000e-11	5.000000e-11	5.000000e-11	5.000000e-11
1.000000e-04	5.000000e-09	5.000000e-09	5.000000e-09	5.000000e-09
1.000000e-03	5.000000e-07	5.000000e-07	5.000000e-07	4.999997e-07
1.000000e-02	4.999958e-05	4.999958e-05	5.000000e-05	4.999750e-05
1.000000e-01	4.995835e-03	4.995835e-03	5.000000e-03	4.975021e-03
1.000000e+00	4.596977e-01	4.596977e-01	5.000000e-01	2.701512e-01

X = 10e6				
δ	Given expression (part b)	My expression (part b)	Taylor w ξ=x (part c)	Taylor w ξ=x+δ (part c)
1.000000e-16	0.000000e+00	-4.205478e-17	-4.205478e-17	-4.205478e-17
1.000000e-15	0.000000e+00	-4.205478e-16	-4.205478e-16	-4.205478e-16
1.000000e-14	0.000000e+00	-4.205478e-15	-4.205478e-15	-4.205478e-15
1.000000e-13	0.000000e+00	-4.205478e-14	-4.205478e-14	-4.205478e-14
1.000000e-12	0.000000e+00	-4.205478e-13	-4.205478e-13	-4.205478e-13
1.000000e-11	0.000000e+00	-4.205478e-12	-4.205478e-12	-4.205478e-12
1.000000e-10	0.000000e+00	-4.205478e-11	-4.205478e-11	-4.205478e-11
1.000000e-09	-7.833313e-10	-4.205478e-10	-4.205478e-10	-4.205478e-10
1.000000e-08	-3.916656e-09	-4.205478e-09	-4.205478e-09	-4.205478e-09
1.000000e-07	-4.229989e-08	-4.205477e-08	-4.205477e-08	-4.205477e-08
1.000000e-06	-4.206485e-07	-4.205473e-07	-4.205473e-07	-4.205473e-07
1.000000e-05	-4.205660e-06	-4.205433e-06	-4.205433e-06	-4.205433e-06
1.000000e-04	-4.205017e-05	-4.205024e-05	-4.205024e-05	-4.205024e-05
1.000000e-03	-4.200942e-04	-4.200941e-04	-4.200942e-04	-4.200939e-04
1.000000e-02	-4.160045e-03	-4.160045e-03	-4.160114e-03	-4.159906e-03
1.000000e-01	-3.745215e-02	-3.745215e-02	-3.751843e-02	-3.733117e-02
1.000000e+00	6.319134e-02	6.319134e-02	3.308740e-02	1.491731e-03