Spreadsheet showing a Monte Carlo simulation used to value a call and a put option.

	A	B	C	D	E	F	G	H	I
1	**Asset**	100		**Time**	**Sim 1**	**Sim 2**	**Sim 3**	**Sim 4**	**Sim 5**
2	**Drift**	5%		0	100.00	100.00	100.00	100.00	100.00
3	**Volatility**	20%		0.01	100.30	102.34	97.50	98.38	96.14
4	**Timestep**	0.01		0.02	103.52	103.38	99.31	98.55	90.84
5	**Int. rate**	5%		0.03	106.01	101.98	101.44	96.12	92.94
6				0.04	101.85	106.67	103.02	94.69	93.17
7				0.05	104.75	107.17	105.05	93.25	91.23
8				0.06	106.57	110.24	109.55	94.50	89.97
9				0.07	101.15	107.73	110.77	93.83	91.08
10									3.21
11				0.09	101.06	111.06	107.49	93.86	93.23
12				0.1	103.35	108.60	109.52	92.84	93.82
94				0.92	109.27	87.76	118.48	69.38	116.43
95				0.93	110.22	87.59	118.13	72.19	118.66
96				0.94	105.56	88.18	117.37	73.40	117.15
97				0.95	106.53	86.81	118.27	70.86	115.82
98				0.96	103.14	85.72	116.85	69.36	115.81
99				0.97	102.20	85.85	112.89	70.24	119.18
100				0					5.75
101				0.99	101.91	87.83			1
102				1	105.99	87.60	111.45	70.67	116.72
103									
104	**Strike**	105	**CALL**	**Payoff**	0.99	0.00	6.45	0.00	11.72
105			**Mean**	8.43					
106			**PV**	8.02					
107			**PUT**	**Payoff**	0.00	17.40	0.00	34.33	0.00
108			**Mean**	8.31					
109			**PV**	7.9					
110									
111									

= D3+$B$4

=E3*EXP(($B$5-0.5*$B$3*$B$3)*$B$4+$B$3*SQRT($B$4)*NORMSINV(RAND()))

=AVERAGE(E104:IV104)

= MAX($B$104-F102,0)

= MAX(G102-$B$104,0)

=D105*EXP(-$B$5*$D$102)