

Sheet1

Unit Sales Price

Price Erosion Rate (%)

Variable Unit Cost

Variable Cost Learning Rate (%)

Total Fixed Costs

Units Sold	Sales Price	Variable Cost
1	\$10.00	\$5.00
2	\$9.50	\$4.85
4	\$9.03	\$4.70
8	\$8.57	\$4.56
16	\$8.15	\$4.43
32	\$7.74	\$4.29
64	\$7.35	\$4.16
128	\$6.98	\$4.04
256	\$6.63	\$3.92
512	\$6.30	\$3.80
1024	\$5.99	\$3.69
2048	\$5.69	\$3.58
4096	\$5.40	\$3.47
8192	\$5.13	\$3.37
16384	\$4.88	\$3.26
32768	\$4.63	\$3.17
65536	\$4.40	\$3.07
131072	\$4.18	\$2.98
262144	\$3.97	\$2.89
524288	\$3.77	\$2.80
1048576	\$3.58	\$2.72
2097152	\$3.41	\$2.64
4194304	\$3.24	\$2.56
8388608	\$3.07	\$2.48
16777216	\$2.92	\$2.41
33554432	\$2.77	\$2.33
67108864	\$2.64	\$2.26
134217728	\$2.50	\$2.20
268435456	\$2.38	\$2.13
536870912	\$2.26	\$2.07

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1073741824	\$2.15	\$2.01
2147483648	\$2.04	\$1.94
4294967296	\$1.94	\$1.89
8589934592	\$1.84	\$1.83
17179869184	\$1.75	\$1.78
34359738368	\$1.66	\$1.72
68719476736	\$1.58	\$1.67
137438953472	\$1.50	\$1.62
274877906944	\$1.42	\$1.57
549755813888	\$1.35	\$1.52
1099511627776	\$1.29	\$1.48
2199023255552	\$1.22	\$1.43
4398046511104	\$1.16	\$1.39
8796093022208	\$1.10	\$1.35
17592186044416	\$1.05	\$1.31
35184372088832	\$0.99	\$1.27
70368744177664	\$0.94	\$1.23
140737488355328	\$0.90	\$1.19
281474976710656	\$0.85	\$1.16
562949953421312	\$0.81	\$1.12
1125899906842624	\$0.77	\$1.09
2251799813685248	\$0.73	\$1.06
4503599627370496	\$0.69	\$1.03
9.00719925474099E+015	\$0.66	\$1.00
1.8014398509482E+016	\$0.63	\$0.97
3.6028797018964E+016	\$0.60	\$0.94
7.20575940379279E+016	\$0.57	\$0.91
1.44115188075856E+017	\$0.54	\$0.88
2.88230376151712E+017	\$0.51	\$0.85
5.76460752303424E+017	\$0.48	\$0.83
1.15292150460685E+018	\$0.46	\$0.80
2.30584300921369E+018	\$0.44	\$0.78
4.61168601842739E+018	\$0.42	\$0.76
9.22337203685478E+018	\$0.39	\$0.73
1.84467440737096E+019	\$0.38	\$0.71
3.68934881474191E+019	\$0.36	\$0.69
7.37869762948382E+019	\$0.34	\$0.67
1.47573952589676E+020	\$0.32	\$0.65
2.95147905179353E+020	\$0.31	\$0.63
5.90295810358706E+020	\$0.29	\$0.61
1.18059162071741E+021	\$0.28	\$0.59
2.36118324143482E+021	\$0.26	\$0.58
4.72236648286965E+021	\$0.25	\$0.56
9.44473296573929E+021	\$0.24	\$0.54
1.88894659314786E+022	\$0.22	\$0.52
3.77789318629572E+022	\$0.21	\$0.51
7.55578637259143E+022	\$0.20	\$0.49
1.51115727451829E+023	\$0.19	\$0.48
3.02231454903657E+023	\$0.18	\$0.46

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6.04462909807315E+023	\$0.17	\$0.45
1.20892581961463E+024	\$0.17	\$0.44
2.41785163922926E+024	\$0.16	\$0.42
4.83570327845852E+024	\$0.15	\$0.41
9.67140655691703E+024	\$0.14	\$0.40
1.93428131138341E+025	\$0.13	\$0.39
3.86856262276681E+025	\$0.13	\$0.38
7.73712524553363E+025	\$0.12	\$0.36
1.54742504910673E+026	\$0.12	\$0.35
3.09485009821345E+026	\$0.11	\$0.34
6.1897001964269E+026	\$0.10	\$0.33
1.23794003928538E+027	\$0.10	\$0.32
2.47588007857076E+027	\$0.09	\$0.31
4.95176015714152E+027	\$0.09	\$0.30
9.90352031428304E+027	\$0.08	\$0.29
1.98070406285661E+028	\$0.08	\$0.29
3.96140812571322E+028	\$0.08	\$0.28
7.92281625142643E+028	\$0.07	\$0.27
1.58456325028529E+029	\$0.07	\$0.26
3.16912650057057E+029	\$0.07	\$0.25
6.33825300114115E+029	\$0.06	\$0.25
1.26765060022823E+030	\$0.06	\$0.24

NONLINEAR BREAKEVEN ANALYSIS

		\$10.00
e (%)	>	5.00%
		\$5.00
		-3.00%
		\$10000.00

Sales	Cost of Sales
\$10.00	\$5.00
\$19.00	\$9.70
\$36.10	\$18.82
\$68.59	\$36.51
\$130.32	\$70.82
\$247.61	\$137.40
\$470.46	\$266.55
\$893.87	\$517.11
\$1698.36	\$1003.19
\$3226.88	\$1946.19
\$6131.07	\$3775.61
\$11649.03	\$7324.69
\$22133.15	\$14209.89
\$42052.98	\$27567.19
\$79900.67	\$53480.35
\$151811.27	\$103751.87
\$288441.41	\$201278.64
\$548038.69	\$390480.56
\$1041273.50	\$757532.28
\$1978419.66	\$1469612.62
\$3758997.35	\$2851048.48
\$7142094.96	\$5531034.06
\$13569980.42	\$10730206.08
\$25782962.79	\$20816599.79
\$48987629.31	\$40384203.59
\$93076495.69	\$78345354.97
\$176845341.81	\$151989988.63
\$336006149.43	\$294860577.95
\$638411683.93	\$572029521.22
\$1212982199.46	\$1109737271.17

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\$2304666178.97	\$2152890306.07
\$4378865740.05	\$4176607193.78
\$8319844906.09	\$8102617955.93
\$15807705321.57	\$15719078834.51
\$30034640110.98	\$30495012938.95
\$57065816210.86	\$59160325101.56
\$108425050800.64	\$114771030697.03
\$206007596521.21	\$222655799552.24
\$391414433390.31	\$431952251131.34
\$743687423441.58	\$837987367194.81
\$1413006104539.01	\$1625695492357.92
\$2684711598624.11	\$3153849255174.37
\$5100952037385.82	\$6118467555038.28
\$9691808871033.05	\$11869827056774.30
\$18414436854962.80	\$23027464490142.10
\$34987430024429.30	\$44673281110875.60
\$66476117046415.70	\$86666165355098.70
\$126304622388190.00	\$168132360788891.00
\$239978782537560.00	\$326176779930449.00
\$455959686821365.00	\$632782953065072.00
\$866323404960593.00	\$1227598928946240.00
\$1646014469425130.00	\$2381541922155703.00
\$3127427491907740.00	\$4620191328982064.00
\$5942112234624709.00	\$8963171178225204.00
\$11290013245786900.00	\$17388552085756900.00
\$21451025166995200.00	\$33733791046368400.00
\$40756947817290900.00	\$65443554629954600.00
\$77438200852852700.00	\$126960495982112000.00
\$147132581620420000.00	\$246303362205297000.00
\$279551905078798000.00	\$477828522678277000.00
\$531148619649716000.00	\$926987333995857000.00
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\$10942065052959900000000000.00	\$41279821205129100000000000.00
\$20789923600623700000000000.00	\$80082853137950600000000000.00
\$39500854841185100000000000.00	\$15536073508762400000000000.00
\$75051624198251700000000000.00	\$30139982606999100000000000.00

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Profit Margin	Fixed Costs	Net Profit
\$5.00	\$10000.00	-\$9995.00
\$9.30	\$10000.00	-\$9990.70
\$17.28	\$10000.00	-\$9982.72
\$32.08	\$10000.00	-\$9967.92
\$59.50	\$10000.00	-\$9940.50
\$110.21	\$10000.00	-\$9889.79
\$203.91	\$10000.00	-\$9796.09
\$376.76	\$10000.00	-\$9623.24
\$695.16	\$10000.00	-\$9304.84
\$1280.69	\$10000.00	-\$8719.31
\$2355.45	\$10000.00	-\$7644.55
\$4324.34	\$10000.00	-\$5675.66
\$7923.26	\$10000.00	-\$2076.74
\$14485.79	\$10000.00	\$4485.79
\$26420.32	\$10000.00	\$16420.32
\$48059.40	\$10000.00	\$38059.40
\$87162.78	\$10000.00	\$77162.78
\$157558.13	\$10000.00	\$147558.13
\$283741.22	\$10000.00	\$273741.22
\$508807.03	\$10000.00	\$498807.03
\$907948.86	\$10000.00	\$897948.86
\$1611060.90	\$10000.00	\$1601060.90
\$2839774.34	\$10000.00	\$2829774.34
\$4966363.01	\$10000.00	\$4956363.01
\$8603425.72	\$10000.00	\$8593425.72
\$14731140.72	\$10000.00	\$14721140.72
\$24855353.17	\$10000.00	\$24845353.17
\$41145571.48	\$10000.00	\$41135571.48
\$66382162.70	\$10000.00	\$66372162.70
\$103244928.29	\$10000.00	\$103234928.29

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\$151775872.90	\$10000.00	\$151765872.90
\$202258546.27	\$10000.00	\$202248546.27
\$217226950.16	\$10000.00	\$217216950.16
\$88626487.06	\$10000.00	\$88616487.06
-\$460372827.97	\$10000.00	-\$460382827.97
-\$2094508890.70	\$10000.00	-\$2094518890.70
-\$6345979896.39	\$10000.00	-\$6345989896.39
-\$16648203031.02	\$10000.00	-\$16648213031.02
-\$40537817741.04	\$10000.00	-\$40537827741.04
-\$94299943753.22	\$10000.00	-\$94299953753.22
-\$212689387818.92	\$10000.00	-\$212689397818.92
-\$469137656550.26	\$10000.00	-\$469137666550.26
-\$1017515517652.46	\$10000.00	-\$1017515527652.46
-\$2178018185741.21	\$10000.00	-\$2178018195741.21
-\$4613027635179.27	\$10000.00	-\$4613027645179.27
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-\$126858538809410000000000.00	\$10000.00	-\$126858538809410000000000.00
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-\$226348201871739000000000000000.00	\$10000.00	-\$226348201871739000000000000000.00

Percent
Profit

-99950.00%
-52582.63%
-27652.96%
-14532.61%
-7627.71%
-3994.10%
-2082.24%
-1076.58%
-547.87%
-270.21%
-124.69%
-48.72%
-9.38%
10.67%
20.55%
25.07%
26.75%
26.92%
26.29%
25.21%
23.89%
22.42%
20.85%
19.22%
17.54%
15.82%
14.05%
12.24%
10.40%
8.51%

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6.59%
4.62%
2.61%
0.56%
-1.53%
-3.67%
-5.85%
-8.08%
-10.36%
-12.68%
-15.05%
-17.47%
-19.95%
-22.47%
-25.05%
-27.68%
-30.37%
-33.12%
-35.92%
-38.78%
-41.70%
-44.69%
-47.73%
-50.84%
-54.02%
-57.26%
-60.57%
-63.95%
-67.40%
-70.93%
-74.53%
-78.20%
-81.95%
-85.78%
-89.69%
-93.69%
-97.76%
-101.93%
-106.18%
-110.52%
-114.95%
-119.48%
-124.10%
-128.81%
-133.63%
-138.55%
-143.57%
-148.70%
-153.94%

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-159.28%
-164.74%
-170.31%
-176.00%
-181.82%
-187.75%
-193.81%
-199.99%
-206.31%
-212.76%
-219.34%
-226.06%
-232.93%
-239.94%
-247.09%
-254.40%
-261.86%
-269.48%
-277.26%
-285.20%
-293.31%
-301.59%