



# Conversion Table

Most designers think of tonality as a percentage of ink coverage, say a 30% tint of black. Photoshop, however, uses a very different system since the human eye needs to “see” at least 150 different levels of tonality in order to “believe” the image is “real.” Adobe sought out a more accurate numbering system than the 101 possible percentages (0% through 100%). The system they selected uses 256 levels of tonality. (256 was chosen since it is already a numbering system used in the computer’s processor.) The tonality of the Photoshop additive numbering system seems to be backwards from tints: that is, although 0% ink coverage is white, a zero on the Photoshop scale represent black. These numbers are important because it is the only numbering system supported in many Photoshop dialog boxes. The following table represents a conversion of the Photoshop 256 levels of tonality to a close approximation of percentages of ink coverage.

□ 255	0.00%	□ 212	16.86%	■ 169	33.73%	■ 126	50.59%	■ 83	67.45%	■ 40	84.31%
□ 254	0.39%	□ 211	17.25%	■ 168	34.12%	■ 125	50.98%	■ 82	67.84%	■ 39	84.71%
□ 253	0.78%	□ 210	17.65%	■ 167	34.51%	■ 124	51.37%	■ 81	68.24%	■ 38	85.10%
□ 252	1.18%	□ 209	18.04%	■ 166	34.90%	■ 123	51.76%	■ 80	68.63%	■ 37	85.49%
□ 251	1.57%	□ 208	18.43%	■ 165	35.29%	■ 122	52.16%	■ 79	69.02%	■ 36	85.88%
□ 250	1.96%	□ 207	18.82%	■ 164	35.69%	■ 121	52.55%	■ 78	69.41%	■ 35	86.27%
□ 249	2.35%	□ 206	19.22%	■ 163	36.08%	■ 120	52.94%	■ 77	69.80%	■ 34	86.67%
□ 248	2.75%	□ 205	19.61%	■ 162	36.47%	■ 119	53.33%	■ 76	70.20%	■ 33	87.06%
□ 247	3.14%	□ 204	20.00%	■ 161	36.86%	■ 118	53.73%	■ 75	70.59%	■ 32	87.45%
□ 246	3.53%	□ 203	20.39%	■ 160	37.25%	■ 117	54.12%	■ 74	70.98%	■ 31	87.84%
□ 245	3.92%	□ 202	20.78%	■ 159	37.65%	■ 116	54.51%	■ 73	71.37%	■ 30	88.24%
□ 244	4.31%	□ 201	21.18%	■ 158	38.04%	■ 115	54.90%	■ 72	71.76%	■ 29	88.63%
□ 243	4.71%	□ 200	21.57%	■ 157	38.43%	■ 114	55.29%	■ 71	72.16%	■ 28	89.02%
□ 242	5.10%	□ 199	21.96%	■ 156	38.82%	■ 113	55.69%	■ 70	72.55%	■ 27	89.41%
□ 241	5.49%	□ 198	22.35%	■ 155	39.22%	■ 112	56.08%	■ 69	72.94%	■ 26	89.80%
□ 240	5.88%	□ 197	22.75%	■ 154	39.61%	■ 111	56.47%	■ 68	73.33%	■ 25	90.20%
□ 239	6.27%	□ 196	23.14%	■ 153	40.00%	■ 110	56.86%	■ 67	73.73%	■ 24	90.59%
□ 238	6.67%	□ 195	23.53%	■ 152	40.39%	■ 109	57.25%	■ 66	74.12%	■ 23	90.98%
□ 237	7.06%	□ 194	23.92%	■ 151	40.78%	■ 108	57.65%	■ 65	74.51%	■ 22	91.37%
□ 236	7.45%	□ 193	24.31%	■ 150	41.18%	■ 107	58.04%	■ 64	74.90%	■ 21	91.76%
□ 235	7.84%	□ 192	24.71%	■ 149	41.57%	■ 106	58.43%	■ 63	75.29%	■ 20	92.16%
□ 234	8.24%	□ 191	25.10%	■ 148	41.96%	■ 105	58.82%	■ 62	75.69%	■ 19	92.55%
□ 233	8.63%	□ 190	25.49%	■ 147	42.35%	■ 104	59.22%	■ 61	76.08%	■ 18	92.94%
□ 232	9.02%	□ 189	25.88%	■ 146	42.75%	■ 103	59.61%	■ 60	76.47%	■ 17	93.33%
□ 231	9.41%	□ 188	26.27%	■ 145	43.14%	■ 102	60.00%	■ 59	76.86%	■ 16	93.73%
□ 230	9.80%	□ 187	26.67%	■ 144	43.53%	■ 101	60.39%	■ 58	77.25%	■ 15	94.12%
□ 229	10.20%	□ 186	27.06%	■ 143	43.92%	■ 100	60.78%	■ 57	77.65%	■ 14	94.51%
□ 228	10.59%	□ 185	27.45%	■ 142	44.31%	■ 99	61.18%	■ 56	78.04%	■ 13	94.90%
□ 227	10.98%	□ 184	27.84%	■ 141	44.71%	■ 98	61.57%	■ 55	78.43%	■ 12	95.29%
□ 226	11.37%	□ 183	28.24%	■ 140	45.10%	■ 97	61.96%	■ 54	78.82%	■ 11	95.69%
□ 225	11.76%	□ 182	28.63%	■ 139	45.49%	■ 96	62.35%	■ 53	79.22%	■ 10	96.08%
□ 224	12.16%	□ 181	29.02%	■ 138	45.88%	■ 95	62.75%	■ 52	79.61%	■ 9	96.47%
□ 223	12.55%	□ 180	29.41%	■ 137	46.27%	■ 94	63.14%	■ 51	80.00%	■ 8	96.86%
□ 222	12.94%	□ 179	29.80%	■ 136	46.67%	■ 93	63.53%	■ 50	80.39%	■ 7	97.25%
□ 221	13.33%	□ 178	30.20%	■ 135	47.06%	■ 92	63.92%	■ 49	80.78%	■ 6	97.65%
□ 220	13.73%	□ 177	30.59%	■ 134	47.45%	■ 91	64.31%	■ 48	81.18%	■ 5	98.04%
□ 219	14.12%	□ 176	30.98%	■ 133	47.84%	■ 90	64.71%	■ 47	81.57%	■ 4	98.43%
□ 218	14.51%	□ 175	31.37%	■ 132	48.24%	■ 89	65.10%	■ 46	81.96%	■ 3	98.82%
□ 217	14.90%	□ 174	31.76%	■ 131	48.63%	■ 88	65.49%	■ 45	82.35%	■ 2	99.22%
□ 216	15.29%	□ 173	32.16%	■ 130	49.02%	■ 87	65.88%	■ 44	82.75%	■ 1	99.61%
□ 215	15.69%	□ 172	32.55%	■ 129	49.41%	■ 86	66.27%	■ 43	83.14%	■ 0	100.00%
□ 214	16.08%	□ 171	32.94%	■ 128	49.80%	■ 85	66.67%	■ 42	83.53%		
□ 213	16.47%	□ 170	33.33%	■ 127	50.20%	■ 84	67.06%	■ 41	83.92%		