Coefficient Table for Computing Extra Half-Time for Overtime

U.S. Department of Labor
Wage and Hour Division

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This table may be used for computing overtime on piecework, bonuses, commissions or fixed salaries for varying hours. Refer to Part 778 of Title 29 of the CFR for guidance regarding when the coefficient method is applicable. This form has been prepared for use by employers who may find the coefficient table to be a timesaver when computing the extra half-time for hours worked over 40 in a workweek.

Hours	Even	1/4	1/2	3/4	1/10	2/10	3/10	4/10	6/10	7/10	8/10	9/10
40		0.003	0.006	0.009	0.0012	0.0025	0.0037	0.0049	0.0074	0.0086	0.0098	0.0110
41	0.012	.015	.018	.021	.0134	.0146	.0157	.0169	.0192	.0204	.0215	.0227
42	.024	.027	.029	.032	.0249	.0261	.0272	.0283	.0305	.0316	.0327	.0338
43	.035	.038	.040	.043	.0360	.0370	.0381	.0392	.0413	.0423	.0434	.0444
44	.045	.048	.051	.053	.0465	.0475	.0485	.0495	.0516	.0526	.0536	.0546
45	.056	.058	.060	.063	.0565	.0575	.0585	.0595	.0614	.0624	.0633	.0643
46	.065	.068	.070	.072	.0662	.0671	.0680	.0690	.0708	.0717	.0726	.0736
47	.074	.077	.079	.081	.0754	.0763	.0772	.0781	.0798	.0807	.0816	.0825
48	.083	.085	.088	.090	.0842	.0851	.0859	.0868	.0885	.0893	.0902	.0910
49	.092	.094	.096	.098	.0927	.0935	.0943	.0951	.0968	.0976	.0984	.0992
50	.100	.102	.104	.106	.1008	.1016	.1024	.1032	.1047	.1055	.1063	.1071
51	.108	.110	.112	.114	.1086	.1094	.1101	.1109	.1124	.1132	.1139	.1146
52	.115	.117	.119	.121	.1161	.1169	.1176	.1183	.1198	.1205	.1212	.1219
53	.123	.124	.126	.128	.1234	.1241	.1248	.1255	.1269	.1276	.1283	.1289
54	.130	.131	.133	.135	.1303	.1310	.1317	.1324	.1337	.1344	.1350	.1357
55	.136	.138	.140	.141	.1370	.1377	.1383	.1390	.1403	.1409	.1416	.1422
56	.143	.144	.146	.148	.1435	.1441	.1448	.1454	.1466	.1473	.1479	.1485
57	.149	.151	.152	.154	.1497	.1503	.1510	.1516	.1528	.1534	.1540	.1546
58	.155	.157	.158	.160	.1558	.1564	.1569	.1575	.1587	.1593	.1599	.1604
59	.161	.162	.164	.165	.1616	.1622	.1627	.1633	.1644	.1650	.1656	.1661
60	.167	.168	.169	.171	.1672	.1678	.1683	.1689	.1700	.1705	.1711	.1716
61	.172	.173	.175	.176	.1727	.1732	.1737	.1743	.1753	.1759	.1764	.1769
62	.177	.179	.180	.181	.1779	.1785	.1790	.1795	.1805	.1810	.1815	.1820
63	.183	.184	.185	.186	.1830	.1835	.1840	.1845	.1855	.1860	.1865	.1870
64	.188	.189	.190	.191	.1880	.1885	.1890	.1894	.1904	.1909	.1914	.1918
65	.192	.193	.195	.196	.1928	.1933	.1937	.1942	.1951	.1956	.1960	.1965
66	.197	.198	.199	.200	.1974	.1979	.1983	.1988	.1997	.2001	.2006	.2010
67	.201	.203	.204	.205	.2019	.2024	.2028	.2033	.2041	.2046	.2050	.2054
68	.206	.207	.208	.209	.2063	.2067	.2072	.2076	.2085	.2089	.2093	.2097
69	.210	.211	.212	.213	.2106	.2110	.2114	.2118	.2126	.2131	.2135	.2139
70	.214	.215	.216	.217	.2147	.2151	.2155	.2159	.2167	.2171	.2175	.2179
71	.218	.219	.220	.221	.2187	.2191	.2195	.2199	.2207	.2211	.2214	.2218
72	.222	.223	.224	.225	.2226	.2230	.2234	.2238	.2245	.2249	.2253	.2257
73	.226	.227	.228	.229	.2264	.2268	.2271	.2275	.2283	.2286	.2290	.2294
74	.230	.231	.232	.232	.2301	.2305	.2308	.2312	.2319	.2323	.2326	.2330
75	.233	.234	.235	.236	.2337	.2340	.2344	.2347	.2354	.2358	.2361	.2365
76	.237	.238	.239	.239	.2372	.2375	.2379	.2382	.2389	.2392	.2396	.2399
77	.240	.241	.242	.243	.2406	.2409	.2413	.2416	.2423	.2426	.2429	.2433
78	.244	.244	.245	.246	.2439	.2442	.2446	.2449	.2455	.2459	.2462	.2465
79	.247	.248	.249	.249	.2472	.2475	.2478	.2481	.2487	.2491	.2494	.2497
80	.250	.251	.252	.252	.2503	.2506	.2509	.2512	.2519	.2522	.2525	.2528
81	.253	.254	.255	.255	.2534	.2537	.2540	.2543	.2549	.2552	.2555	.2558
82	.256	.257	.258	.258	.2564	.2567	.2570	.2573	.2579	.2582	.2585	.2587
83	.259	.260	.261	.261	.2593	.2596	.2599	.2602	.2608	.2611	.2613	.2616
84	.262	.263	.263	.264	.2622	.2625	.2628	.2630	.2636	.2639	.2642	.2644
85	.265	.265	.266	.267	.2650	.2653	.2655	.2658	.2666	.2664	.2669	.2672

TO CONVERT INTO WEEKLY EQUIVALENT: Multiply SEMIMONTHLY salary by 0.4615; MONTHLY salary by .02308; ANNUAL salary by 0.01923.

TO CONVERT INTO STRAIGHT-TIME HOURLY EQUIVALENT FOR 40 HOURS: Multiply salary by 0.025; SEMIMONTHLY by 0.01154; MONTHLY salary by 0.00577; ANNUAL by 0.00048.

TO CONVERT INTO TIME AND ONE-HALF HOURLY RATE BASED ON 40 HOUR WEEK: Multiply WEEKLY salary by 0.0375; SEMIMONTHLY by 0.0173; MONTHLY salary by 0.00866; ANNUAL by 0.000721.

CAUTION: Be sure straight-time earnings are not below legal minimum

(SEE INSTRUCTIONS ON REVERSE SIDE)

General. In determining the extra half-time that is due for overtime pay after 40 hours, the method of calculation commonly used is to divide the straight-time earnings by the total number of hours worked and multiply the result by the number of overtime hours divided by two. For instance, the

Computation for 48 hours would be $\dfrac{\text{Earnings}}{48} \times \dfrac{8}{2}$; for 50 hours, $\dfrac{\text{Earnings}}{50} \times \dfrac{10}{2}$; for 47 ¾ hours,

$\dfrac{\text{Earnings}}{47\,3/4} \times \dfrac{7\,3/4}{2}$. The table on the reverse side contains the decimal equivalents of the fraction, $\dfrac{\text{O.T.Hours}}{\text{Total Hr. X 2}}$

For example, the decimal for 48 hours is $\dfrac{8}{48 \times 2} = \dfrac{1}{12} = .083$; for 50 hours it is $\dfrac{10}{50 \times 2} = \dfrac{1}{10} = .1$;

and for 47 ¾ hours $\dfrac{7\,3/4}{47\,3/4 \times 2} = \dfrac{7.75}{95.5} = .081$.

How to use: (a) Multiply the straight-time earnings for an overtime week by the applicable decimal and the result will be the extra half-time due. Thus, by using the decimals in the table (on the reverse side) the computations performed are, in effect, exactly the same as if the equivalent fractions were used, with the advantage of having eliminated the long division necessitated by the fractions. For example:

    (1). A pieceworker earns varying wages each week. In a 43 $^{9/10}$ hour week he earned $395.10 straight-time. The coefficient for 43 $^{9/10}$ hours is .0444. .0444 X $395.10 = $17.54, additional half-time due. $395.10 + $17.54 = $412.64 the pieceworker's total pay for the week.

    (2). Jones is paid a weekly salary of $463.50. He worked 51 ½ hours. The coefficient for 51 ½ hours is .112. .112 X $463.50 = $51.91. and $463.50 + $51.91 = $515.41, Jones' total pay for the week.

(b) The decimal table can also be used effectively when back wages are due because of additions to wages (such as a weekly bonus) that were not included in the regular rate in computing overtime. For example:

    (1). An employee worked 48 hours and received a production bonus of $19.20 which was not included in the regular rage. Thus, $19.20 X 0.83 = $1.60, the additional half-time due on the bonus.

    (2). Jones in the same week (example (a), (2) above) received a production bonus of $50.00. .112 X $50.00 = $5.60, the additional half-time due on the bonus. $463.50 + $51.91 + $50.00 + $5.60 = $571.01, Jones' total earnings. A further short-cut (combining (a) (2) and (b) (2)) would be: $463.50 + $50.00 = $513.50 X .112 = $57.51 + $513.50 = $571.01, Jones' total earnings.

(c) **Short-cuts For Computing Back Wages.** When both the overtime hours and the earnings vary, individual weekly computations must be made. However, if an employee is paid at a constant hourly rate, time can be saved by adding the unpaid overtime hours during the period and multiplying the total by one-half the hourly rate. When the weekly hours vary and the straight-time earnings are constant, add the decimals for the overtime weeks and multiply the total by the earnings for 1 week. When the weekly hours are constant but the earnings vary, add the earnings for the overtime weeks and multiply the total by the decimal for 1 week. For example:

VARYING HOURS – CONSTANT EARNINGS			CONSTANT HOURS – VARYING EARNINGS	
Hours	Decimals	Earnings	Hours	Earnings
42	0.024	$360.50	47	$423.00
43	.035	$360.50	47	$432.40
46	.065	$360.50	47	$446.50
	.124 x $360.50 = $44.70			$1,301.90 x .074 = $96.34