

Thread Pitch	72<A+B<134 and 88<C+D<138				Percent Error	Error in 1" of Thread
	A	B	C	D		
1.000 TPI	80	20	80	20	0.00%	0.0000 in
2.000 TPI	80	20	80	40	0.00%	0.0000 in
2.000 TPI	80	40	80	20	0.00%	0.0000 in
3.000 TPI	60	20	80	45	0.00%	0.0000 in
3.000 TPI	60	45	80	20	0.00%	0.0000 in
3.000 TPI	80	20	60	45	0.00%	0.0000 in
4.000 TPI	40	40	80	20	0.00%	0.0000 in
4.000 TPI	80	40	80	40	0.00%	0.0000 in
4.500 TPI	40	45	80	20	0.00%	0.0000 in
4.500 TPI	80	40	80	45	0.00%	0.0000 in
4.500 TPI	80	45	80	40	0.00%	0.0000 in
5.000 TPI	40	50	80	20	0.00%	0.0000 in
5.000 TPI	80	20	40	50	0.00%	0.0000 in
5.000 TPI	80	40	80	50	0.00%	0.0000 in
5.000 TPI	80	50	80	40	0.00%	0.0000 in
6.000 TPI	35	50	80	21	0.00%	0.0000 in
6.000 TPI	40	60	80	20	0.00%	0.0000 in
6.000 TPI	60	40	80	45	0.00%	0.0000 in
6.000 TPI	60	45	80	40	0.00%	0.0000 in
6.000 TPI	80	20	40	60	0.00%	0.0000 in
6.000 TPI	80	40	60	45	0.00%	0.0000 in
6.000 TPI	80	45	60	40	0.00%	0.0000 in
7.000 TPI	40	35	80	40	0.00%	0.0000 in
7.000 TPI	40	40	80	35	0.00%	0.0000 in
7.000 TPI	60	21	40	50	0.00%	0.0000 in
8.000 TPI	40	Any gear		20	0.00%	0.0000 in
8.000 TPI	80	Any gear		40	0.00%	0.0000 in
8.000 TPI	80	20	40	80	0.00%	0.0000 in
9.000 TPI	40	40	80	45	0.00%	0.0000 in
9.000 TPI	40	45	80	40	0.00%	0.0000 in
9.000 TPI	80	Any gear		45	0.00%	0.0000 in
10.000 TPI	40	40	80	50	0.00%	0.0000 in
10.000 TPI	40	50	80	40	0.00%	0.0000 in
10.000 TPI	80	Any gear		50	0.00%	0.0000 in
11.000 TPI	20	55	80	20	0.00%	0.0000 in
11.000 TPI	40	40	80	55	0.00%	0.0000 in
11.000 TPI	40	55	80	40	0.00%	0.0000 in
11.000 TPI	80	Any gear		55	0.00%	0.0000 in
12.000 TPI	20	60	80	20	0.00%	0.0000 in
12.000 TPI	40	40	60	45	0.00%	0.0000 in
12.000 TPI	40	45	60	40	0.00%	0.0000 in
12.000 TPI	40	60	80	40	0.00%	0.0000 in
12.000 TPI	60	Any gear		45	0.00%	0.0000 in
12.000 TPI	80	Any gear		60	0.00%	0.0000 in
13.000 TPI	20	65	80	20	0.00%	0.0000 in
13.000 TPI	40	65	80	40	0.00%	0.0000 in
13.000 TPI	80	Any gear		65	0.00%	0.0000 in

Thread Pitch	72<A+B<134 and 88<C+D<138				Percent Error	Error in 1" of Thread
	A	B	C	D		
14.000 TPI	40	Any gear		35	0.00%	0.0000 in
14.000 TPI	80	35	40	80	0.00%	0.0000 in
15.000 TPI	40	45	60	50	0.00%	0.0000 in
15.000 TPI	40	50	60	45	0.00%	0.0000 in
15.000 TPI	40	60	80	50	0.00%	0.0000 in
15.000 TPI	60	45	40	50	0.00%	0.0000 in
15.000 TPI	80	50	40	60	0.00%	0.0000 in
16.000 TPI	20	Any gear		20	0.00%	0.0000 in
16.000 TPI	21	Any gear		21	0.00%	0.0000 in
16.000 TPI	35	Any gear		35	0.00%	0.0000 in
16.000 TPI	40	Any gear		40	0.00%	0.0000 in
16.000 TPI	45	Any gear		45	0.00%	0.0000 in
16.000 TPI	50	Any gear		50	0.00%	0.0000 in
16.000 TPI	55	Any gear		55	0.00%	0.0000 in
16.000 TPI	57	Any gear		57	0.00%	0.0000 in
16.000 TPI	60	Any gear		60	0.00%	0.0000 in
16.000 TPI	65	Any gear		65	0.00%	0.0000 in
16.000 TPI	80	Any gear		80	0.00%	0.0000 in
17.018 TPI	50	45	55	65	0.11%	0.0011 in
17.018 TPI	50	65	55	45	0.11%	0.0011 in
17.018 TPI	55	45	50	65	0.11%	0.0011 in
17.018 TPI	55	65	50	45	0.11%	0.0011 in
18.000 TPI	40	Any gear		45	0.00%	0.0000 in
18.000 TPI	80	45	40	80	0.00%	0.0000 in
19.000 TPI	21	57	80	35	0.00%	0.0000 in
19.000 TPI	40	50	60	57	0.00%	0.0000 in
19.000 TPI	40	57	60	50	0.00%	0.0000 in
19.000 TPI	60	50	40	57	0.00%	0.0000 in
19.000 TPI	60	57	40	50	0.00%	0.0000 in
20.000 TPI	21	60	80	35	0.00%	0.0000 in
20.000 TPI	40	Any gear		50	0.00%	0.0000 in
20.000 TPI	80	50	40	80	0.00%	0.0000 in
21.000 TPI	20	60	80	35	0.00%	0.0000 in
21.000 TPI	40	35	40	60	0.00%	0.0000 in
22.000 TPI	20	55	80	40	0.00%	0.0000 in
22.000 TPI	40	Any gear		55	0.00%	0.0000 in
23.111 TPI	40	40	45	65	0.48%	0.0048 in
23.111 TPI	45	Any gear		65	0.48%	0.0048 in
24.000 TPI	20	60	80	40	0.00%	0.0000 in
24.000 TPI	40	Any gear		60	0.00%	0.0000 in
24.000 TPI	40	80	60	45	0.00%	0.0000 in
24.000 TPI	60	45	40	80	0.00%	0.0000 in
24.951 TPI	45	50	57	80	0.20%	0.0019 in
24.951 TPI	45	80	57	50	0.20%	0.0019 in
24.951 TPI	57	50	45	80	0.20%	0.0019 in
26.000 TPI	20	65	80	40	0.00%	0.0000 in
26.000 TPI	40	Any gear		65	0.00%	0.0000 in
27.000 TPI	20	60	80	45	0.00%	0.0000 in

Thread Pitch	72<A+B<134 and 88<C+D<138				Percent Error	Error in 1" of Thread
	A	B	C	D		
27.000 TPI	40	45	40	60	0.00%	0.0000 in
28.000 TPI	20	Any gear		35	0.00%	0.0000 in
28.000 TPI	40	35	40	80	0.00%	0.0000 in
28.000 TPI	80	35	20	80	0.00%	0.0000 in
29.011 TPI	21	55	65	45	0.04%	0.0004 in
30.000 TPI	20	60	80	50	0.00%	0.0000 in
30.000 TPI	40	50	40	60	0.00%	0.0000 in
30.000 TPI	40	60	40	50	0.00%	0.0000 in
31.030 TPI	45	60	55	80	0.10%	0.0010 in
31.030 TPI	45	80	55	60	0.10%	0.0010 in
31.030 TPI	55	60	45	80	0.10%	0.0010 in
32.000 TPI	20	Any gear		40	0.00%	0.0000 in
32.000 TPI	40	Any gear		80	0.00%	0.0000 in
32.000 TPI	80	40	20	80	0.00%	0.0000 in
33.000 TPI	20	55	60	45	0.00%	0.0000 in
33.000 TPI	20	60	80	55	0.00%	0.0000 in
33.000 TPI	40	55	40	60	0.00%	0.0000 in
33.000 TPI	40	60	40	55	0.00%	0.0000 in
34.048 TPI	21	65	80	55	0.14%	0.0014 in
35.077 TPI	20	57	65	50	0.22%	0.0022 in
36.000 TPI	20	Any gear		45	0.00%	0.0000 in
36.000 TPI	40	45	40	80	0.00%	0.0000 in
36.000 TPI	80	45	20	80	0.00%	0.0000 in
36.978 TPI	45	65	50	80	0.06%	0.0006 in
36.978 TPI	45	80	50	65	0.06%	0.0006 in
36.978 TPI	50	65	45	80	0.06%	0.0006 in
36.978 TPI	50	80	45	65	0.06%	0.0006 in
38.000 TPI	20	57	60	50	0.00%	0.0000 in
39.000 TPI	20	65	60	45	0.00%	0.0000 in
39.000 TPI	40	60	40	65	0.00%	0.0000 in
39.000 TPI	40	65	40	60	0.00%	0.0000 in
40.000 TPI	20	Any gear		50	0.00%	0.0000 in
40.000 TPI	40	50	40	80	0.00%	0.0000 in
40.000 TPI	40	80	40	50	0.00%	0.0000 in
40.000 TPI	80	50	20	80	0.00%	0.0000 in
41.040 TPI	20	57	50	45	0.10%	0.0010 in
42.092 TPI	20	57	65	60	0.22%	0.0022 in
42.092 TPI	20	60	65	57	0.22%	0.0022 in
43.200 TPI	20	60	50	45	0.46%	0.0046 in
44.000 TPI	20	Any gear		55	0.00%	0.0000 in
44.000 TPI	40	55	40	80	0.00%	0.0000 in
44.000 TPI	40	80	40	55	0.00%	0.0000 in
45.022 TPI	21	50	55	65	0.05%	0.0005 in
45.022 TPI	21	65	55	50	0.05%	0.0005 in
46.222 TPI	40	65	45	80	0.48%	0.0048 in
46.222 TPI	40	80	45	65	0.48%	0.0048 in
46.222 TPI	45	65	40	80	0.48%	0.0048 in
46.222 TPI	45	80	40	65	0.48%	0.0048 in

Thread Pitch	A	B	C	D	Percent Error	Error in 1" of Thread
47.048 TPI	21	57	60	65	0.10%	0.0010 in
47.048 TPI	21	65	60	57	0.10%	0.0010 in
48.000 TPI	20	Any gear		60	0.00%	0.0000 in
48.000 TPI	20	80	60	45	0.00%	0.0000 in
48.000 TPI	40	60	40	80	0.00%	0.0000 in
48.000 TPI	40	80	40	60	0.00%	0.0000 in
48.000 TPI	60	45	20	80	0.00%	0.0000 in
48.889 TPI	20	55	45	50	0.23%	0.0023 in
49.870 TPI	21	80	55	45	0.26%	0.0026 in
49.870 TPI	55	45	21	80	0.26%	0.0026 in
51.200 TPI	20	80	50	40	0.39%	0.0039 in
51.200 TPI	40	80	50	80	0.39%	0.0039 in
51.200 TPI	50	40	20	80	0.39%	0.0039 in
51.200 TPI	50	80	40	80	0.39%	0.0039 in
52.000 TPI	20	Any gear		65	0.00%	0.0000 in
52.000 TPI	40	65	40	80	0.00%	0.0000 in
52.000 TPI	40	80	40	65	0.00%	0.0000 in
53.079 TPI	21	55	45	57	0.15%	0.0015 in
53.079 TPI	21	57	45	55	0.15%	0.0015 in
54.026 TPI	21	60	55	65	0.05%	0.0005 in
54.026 TPI	21	65	55	60	0.05%	0.0005 in
55.000 TPI	20	55	40	50	0.00%	0.0000 in
56.000 TPI	40	35	20	80	0.00%	0.0000 in
57.000 TPI	20	57	40	50	0.00%	0.0000 in
57.905 TPI	21	57	45	60	0.16%	0.0016 in
57.905 TPI	21	60	45	57	0.16%	0.0016 in
57.905 TPI	21	80	60	57	0.16%	0.0016 in
57.905 TPI	60	57	21	80	0.16%	0.0016 in
59.077 TPI	20	80	65	60	0.13%	0.0013 in
59.077 TPI	65	60	20	80	0.13%	0.0013 in
60.000 TPI	20	60	40	50	0.00%	0.0000 in
62.041 TPI	21	50	35	57	0.07%	0.0007 in
62.857 TPI	21	55	40	60	0.23%	0.0023 in
62.857 TPI	21	60	40	55	0.23%	0.0023 in
64.000 TPI	20	Any gear		80	0.00%	0.0000 in
64.000 TPI	40	40	20	80	0.00%	0.0000 in
64.000 TPI	40	80	40	80	0.00%	0.0000 in
65.000 TPI	20	65	40	50	0.00%	0.0000 in
66.000 TPI	20	55	40	60	0.00%	0.0000 in
66.000 TPI	20	60	40	55	0.00%	0.0000 in
67.048 TPI	21	55	50	80	0.07%	0.0007 in
67.048 TPI	21	80	50	55	0.07%	0.0007 in
67.048 TPI	50	55	21	80	0.07%	0.0007 in
68.095 TPI	21	55	40	65	0.14%	0.0014 in
68.095 TPI	21	65	40	55	0.14%	0.0014 in
69.333 TPI	20	60	45	65	0.48%	0.0048 in
69.333 TPI	20	65	45	60	0.48%	0.0048 in
69.333 TPI	20	80	60	65	0.48%	0.0048 in

Thread Pitch	A	B	C	D	Percent Error	Error in 1" of Thread
69.333 TPI	60	65	20	80	0.48%	0.0048 in
69.818 TPI	20	60	55	80	0.26%	0.0026 in
69.818 TPI	20	80	55	60	0.26%	0.0026 in
69.818 TPI	55	60	20	80	0.26%	0.0026 in
71.111 TPI	20	80	45	50	0.16%	0.0016 in
71.111 TPI	45	50	20	80	0.16%	0.0016 in
72.000 TPI	40	45	20	80	0.00%	0.0000 in
72.982 TPI	20	65	57	80	0.02%	0.0002 in
72.982 TPI	20	80	57	65	0.02%	0.0002 in
72.982 TPI	57	65	20	80	0.02%	0.0002 in
75.429 TPI	20	55	35	60	0.57%	0.0057 in
75.429 TPI	20	60	35	55	0.57%	0.0057 in
76.190 TPI	21	50	40	80	0.25%	0.0025 in
76.190 TPI	21	80	40	50	0.25%	0.0025 in
76.190 TPI	40	50	21	80	0.25%	0.0025 in
76.800 TPI	20	60	50	80	0.26%	0.0026 in
76.800 TPI	20	80	50	60	0.26%	0.0026 in
76.800 TPI	50	60	20	80	0.26%	0.0026 in
78.000 TPI	20	60	40	65	0.00%	0.0000 in
78.000 TPI	20	65	40	60	0.00%	0.0000 in
79.238 TPI	21	65	50	80	0.30%	0.0030 in
79.238 TPI	21	80	50	65	0.30%	0.0030 in
79.238 TPI	50	65	21	80	0.30%	0.0030 in
80.000 TPI	20	80	40	50	0.00%	0.0000 in
80.000 TPI	40	50	20	80	0.00%	0.0000 in
81.067 TPI	20	57	45	80	0.08%	0.0008 in
81.067 TPI	20	80	45	57	0.08%	0.0008 in
81.067 TPI	45	57	20	80	0.08%	0.0008 in
82.286 TPI	35	45	20	80	0.35%	0.0035 in
83.200 TPI	20	65	50	80	0.24%	0.0024 in
83.200 TPI	20	80	50	65	0.24%	0.0024 in
83.200 TPI	50	65	20	80	0.24%	0.0024 in
83.810 TPI	21	55	40	80	0.23%	0.0023 in
83.810 TPI	21	80	40	55	0.23%	0.0023 in
83.810 TPI	40	55	21	80	0.23%	0.0023 in
84.898 TPI	21	60	35	65	0.12%	0.0012 in
84.898 TPI	21	65	35	60	0.12%	0.0012 in
85.547 TPI	21	80	57	80	0.53%	0.0053 in
87.075 TPI	21	50	35	80	0.09%	0.0009 in
87.075 TPI	35	50	21	80	0.09%	0.0009 in
88.000 TPI	20	55	40	80	0.00%	0.0000 in
88.000 TPI	20	80	40	55	0.00%	0.0000 in
88.000 TPI	40	55	20	80	0.00%	0.0000 in
89.143 TPI	20	60	35	65	0.16%	0.0016 in
89.143 TPI	20	65	35	60	0.16%	0.0016 in
92.444 TPI	20	65	45	80	0.48%	0.0048 in
92.444 TPI	20	80	45	65	0.48%	0.0048 in
92.444 TPI	45	65	20	80	0.48%	0.0048 in

Thread Pitch	72<A+B<134 and 88<C+D<138				Percent Error	Error in 1" of Thread
	A	B	C	D		
93.091 TPI	20	80	55	80	0.10%	0.0010 in
93.091 TPI	20	80	55	80	0.98%	0.0097 in
96.000 TPI	20	60	40	80	0.00%	0.0000 in
96.000 TPI	20	80	40	60	0.00%	0.0000 in
96.000 TPI	40	60	20	80	0.00%	0.0000 in
100.571 TPI	20	55	35	80	0.57%	0.0057 in
100.571 TPI	20	80	35	55	0.57%	0.0057 in
100.571 TPI	35	55	20	80	0.57%	0.0057 in
256.000 TPI	20	80	20	80	0.00%	0.0000 in
Thread Pitch	A	B	C	D	Percent Error	Error in 10 Pitches
0.099 mm	20	80	20	80	0.79%	0.0781 mm
0.348 mm	20	57	50	80	0.53%	0.0533 mm
0.348 mm	20	80	50	57	0.53%	0.0533 mm
0.348 mm	50	57	20	80	0.53%	0.0533 mm
0.400 mm	20	55	45	65	0.09%	0.0087 mm
0.400 mm	20	65	45	55	0.09%	0.0087 mm
0.450 mm	21	57	50	65	0.02%	0.0022 mm
0.450 mm	21	65	50	57	0.02%	0.0022 mm
0.500 mm	21	50	45	60	0.01%	0.0013 mm
0.500 mm	21	60	45	50	0.01%	0.0013 mm
0.500 mm	21	80	60	50	0.01%	0.0013 mm
0.500 mm	60	50	21	80	0.01%	0.0013 mm
0.600 mm	35	57	40	65	0.02%	0.0022 mm
0.600 mm	35	65	40	57	0.02%	0.0022 mm
0.600 mm	40	57	35	65	0.02%	0.0022 mm
0.600 mm	40	65	35	57	0.02%	0.0022 mm
0.650 mm	21	57	50	45	0.02%	0.0022 mm
0.650 mm	35	57	40	60	0.02%	0.0022 mm
0.650 mm	35	60	40	57	0.02%	0.0022 mm
0.650 mm	40	57	35	60	0.02%	0.0022 mm
0.650 mm	40	60	35	57	0.02%	0.0022 mm
0.699 mm	35	55	45	65	0.09%	0.0087 mm
0.699 mm	35	65	45	55	0.09%	0.0087 mm
0.699 mm	45	55	35	65	0.09%	0.0087 mm
0.699 mm	45	65	35	55	0.09%	0.0087 mm
0.750 mm	35	57	50	65	0.02%	0.0022 mm
0.750 mm	35	65	50	57	0.02%	0.0022 mm
0.750 mm	50	57	35	65	0.02%	0.0022 mm
0.750 mm	50	65	35	57	0.02%	0.0022 mm
0.799 mm	40	55	45	65	0.09%	0.0087 mm
0.799 mm	40	65	45	55	0.09%	0.0087 mm
0.799 mm	45	55	40	65	0.09%	0.0087 mm

Thread Pitch	72<A+B<134 and 88<C+D<138				Percent Error	Error in 1" of Thread
	A	B	C	D		
0.799 mm	45	65	40	55	0.09%	0.0087 mm
0.851 mm	21	55	80	57	0.09%	0.0084 mm
0.851 mm	21	57	80	55	0.09%	0.0084 mm
0.900 mm	35	57	60	65	0.02%	0.0022 mm
0.900 mm	35	65	60	57	0.02%	0.0022 mm
0.900 mm	60	57	35	65	0.02%	0.0022 mm
0.900 mm	60	65	35	57	0.02%	0.0022 mm
0.950 mm	21	50	57	40	0.01%	0.0013 mm
1.000 mm	21	50	60	40	0.01%	0.0013 mm
1.250 mm	35	40	45	50	0.01%	0.0013 mm
1.250 mm	60	20	21	80	0.01%	0.0013 mm
1.501 mm	40	50	65	55	0.06%	0.0061 mm
1.501 mm	40	55	65	50	0.06%	0.0061 mm
1.501 mm	65	50	40	55	0.06%	0.0061 mm
1.501 mm	65	55	40	50	0.06%	0.0061 mm
1.751 mm	40	35	55	57	0.04%	0.0036 mm
1.751 mm	40	57	55	35	0.04%	0.0036 mm
1.751 mm	55	35	40	57	0.04%	0.0036 mm
1.996 mm	40	35	55	50	0.22%	0.0214 mm
1.996 mm	40	50	55	35	0.22%	0.0214 mm
1.996 mm	55	35	40	50	0.22%	0.0214 mm
2.502 mm	60	45	65	55	0.06%	0.0061 mm
2.502 mm	60	55	65	45	0.06%	0.0061 mm
2.502 mm	65	45	60	55	0.06%	0.0061 mm
2.502 mm	65	55	60	45	0.06%	0.0061 mm
2.502 mm	65	60	80	55	0.06%	0.0061 mm
3.002 mm	65	50	80	55	0.06%	0.0061 mm
3.002 mm	65	55	80	50	0.06%	0.0061 mm
3.002 mm	80	50	65	55	0.06%	0.0061 mm
3.501 mm	65	21	57	80	0.03%	0.0029 mm
3.991 mm	55	35	80	50	0.22%	0.0214 mm
3.991 mm	55	50	80	35	0.22%	0.0214 mm
3.991 mm	80	35	55	50	0.22%	0.0214 mm
3.991 mm	80	50	55	35	0.22%	0.0214 mm
4.504 mm	55	21	65	60	0.09%	0.0094 mm
4.504 mm	65	21	55	60	0.09%	0.0094 mm
4.989 mm	55	21	60	50	0.22%	0.0214 mm
4.989 mm	55	35	80	40	0.22%	0.0214 mm
4.989 mm	55	40	80	35	0.22%	0.0214 mm
4.989 mm	60	21	55	50	0.22%	0.0214 mm
4.989 mm	80	35	55	40	0.22%	0.0214 mm

ralph_pattersonus wrote:

>40,50,40,50 will do the job. Calculate the ratio by;

>16tpi x 50/40x50/40=25tpi

>HTH

>

$$72 < A+B < 134 \text{ and } 88 < C+D < 138$$

Thread Pitch	A	B	C	D	Percent Error	Error in 1" of Thread
4.989 mm	80	40	55	35	0.22%	0.0214 mm
5.498 mm	50	21	80	55	0.04%	0.0039 mm
5.498 mm	50	55	80	21	0.04%	0.0039 mm
5.498 mm	80	21	50	55	0.04%	0.0039 mm
6.006 mm	55	21	65	45	0.09%	0.0094 mm
6.006 mm	65	21	55	45	0.09%	0.0094 mm