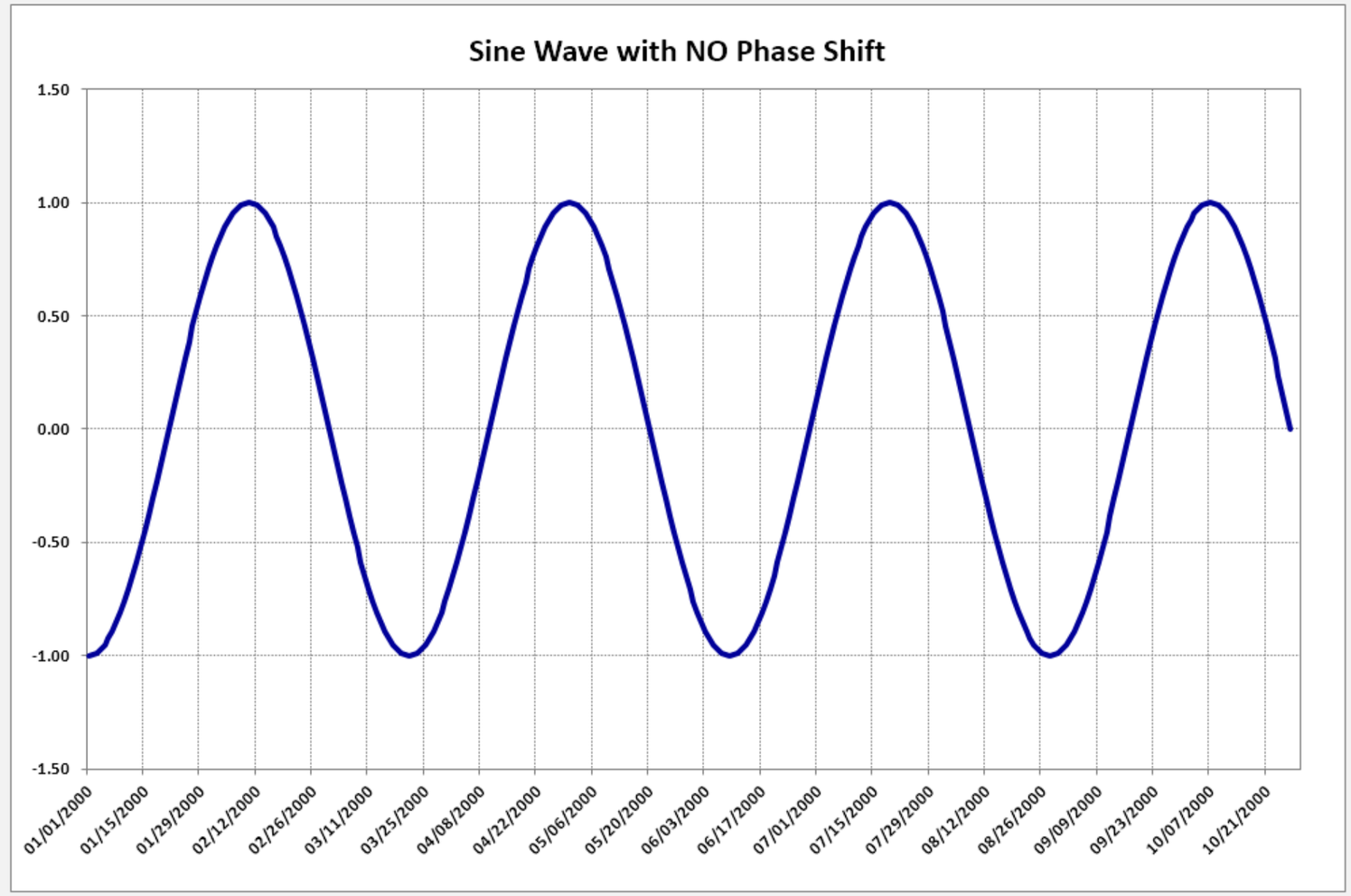
P2 | 0

	A	B	C	D	E
1	Date	Dummy for Cycle Length		Sine Wave for Cycle Length	
2		80		80	
3	01/01/2000	-0.2000	=+$M$2	-1.0000	=+SIN((2*PI()*$J$2*B3)-$P$2)
4	01/02/2000	-0.1900	=+B3+0.01	-0.9969	=+SIN((2*PI()*$J$2*B4)-$P$2)
5	01/03/2000	-0.1800	=+B4+0.01	-0.9877	=+SIN((2*PI()*$J$2*B5)-$P$2)
6	01/04/2000	-0.1700	=+B5+0.01	-0.9724	=+SIN((2*PI()*$J$2*B6)-$P$2)
7	01/05/2000	-0.1600	=+B6+0.01	-0.9511	=+SIN((2*PI()*$J$2*B7)-$P$2)
8	01/06/2000	-0.1500		-0.9239	
9	01/07/2000	-0.1400		-0.8910	
10	01/08/2000	-0.1300		-0.8526	
11	01/09/2000	-0.1200		-0.8090	
12	01/10/2000	-0.1100		-0.7604	
13	01/11/2000	-0.1000		-0.7071	
14	01/12/2000	-0.0900		-0.6494	
15	01/13/2000	-0.0800		-0.5878	
16	01/14/2000	-0.0700		-0.5225	
17	01/15/2000	-0.0600		-0.4540	
18	01/16/2000	-0.0500		-0.3827	
19	01/17/2000	-0.0400		-0.3090	
20	01/18/2000	-0.0300		-0.2334	
21	01/19/2000	-0.0200		-0.1564	
22	01/20/2000	-0.0100		-0.0785	
23	01/21/2000	0.0000		0.0000	
24	01/22/2000	0.0100		0.0785	
25	01/23/2000	0.0200		0.1564	
26	01/24/2000	0.0300		0.2334	
27	01/25/2000	0.0400		0.3090	
28	01/26/2000	0.0500		0.3827	
29	01/27/2000	0.0600		0.4540	
30	01/28/2000	0.0700		0.5225	
31	01/29/2000	0.0800		0.5878	
32	01/30/2000	0.0900		0.6494	
33	01/31/2000	0.1000		0.7071	
34	02/01/2000	0.1100		0.7604	
35	02/02/2000	0.1200		0.8090	
36	02/03/2000	0.1300		0.8526	
37	02/04/2000	0.1400		0.8910	

Frequency (f) = (1/T) x 100

Cycle Length in Days: 80 **Frequency (f): 1.2500** **=(1/H2)*100** **Dummy Start at Cycle Trough: -0.2000** **=ASIN(-1)/(2*PI()*$J$2)** **Phase Shift: 0.00**

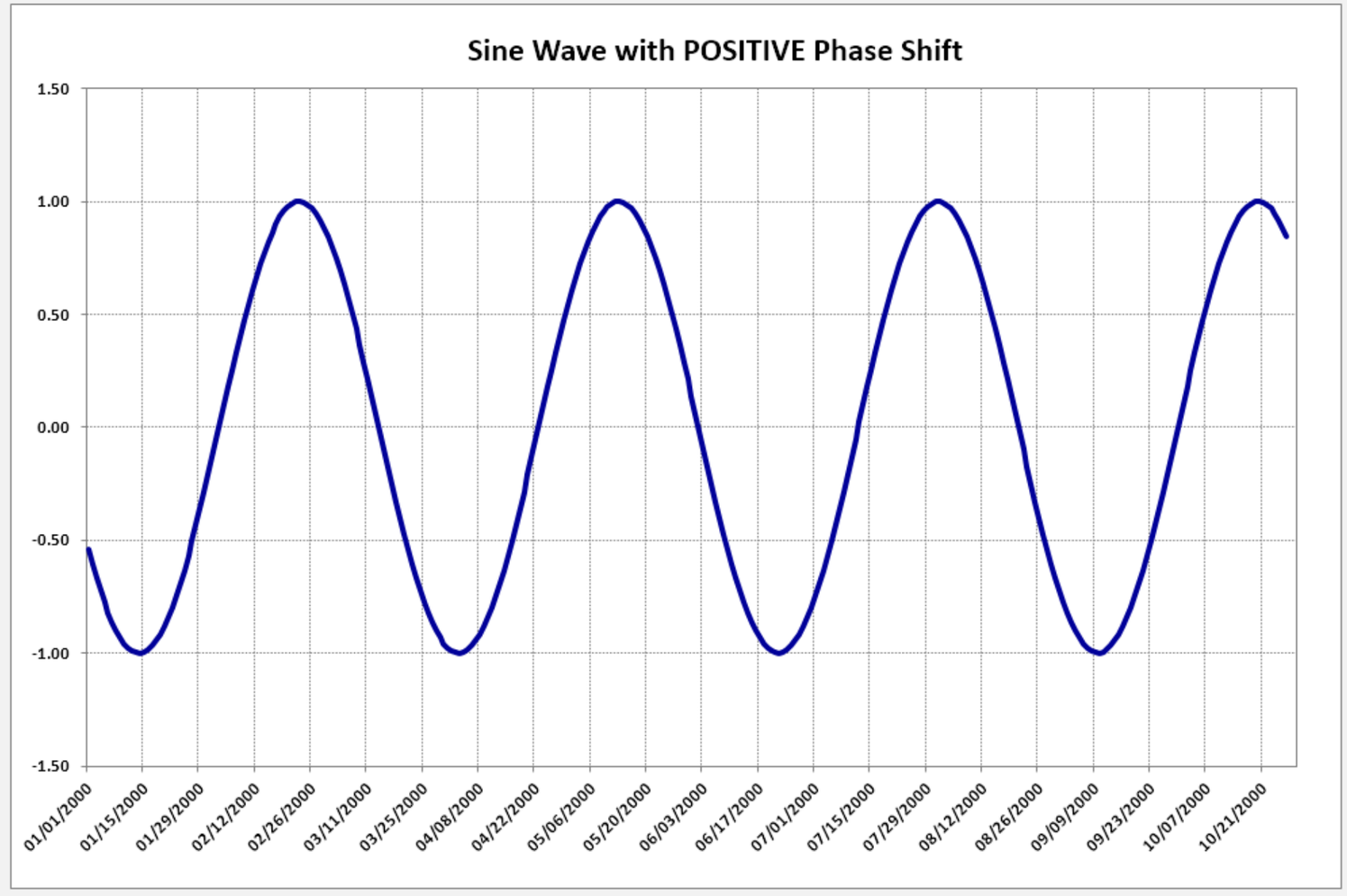


P2 | 1

	A	B	C	D	E
1	Date	Dummy for Cycle Length 80		Sine Wave for Cycle Length 80	
2					
3	01/01/2000	-0.2000	=+$M$2	-0.5403	=+SIN((2*PI()*$J$2*B3)-$P$2)
4	01/02/2000	-0.1900	=+B3+0.01	-0.6047	=+SIN((2*PI()*$J$2*B4)-$P$2)
5	01/03/2000	-0.1800	=+B4+0.01	-0.6653	=+SIN((2*PI()*$J$2*B5)-$P$2)
6	01/04/2000	-0.1700	=+B5+0.01	-0.7218	=+SIN((2*PI()*$J$2*B6)-$P$2)
7	01/05/2000	-0.1600	=+B6+0.01	-0.7739	=+SIN((2*PI()*$J$2*B7)-$P$2)
8	01/06/2000	-0.1500		-0.8212	
9	01/07/2000	-0.1400		-0.8634	
10	01/08/2000	-0.1300		-0.9004	
11	01/09/2000	-0.1200		-0.9317	
12	01/10/2000	-0.1100		-0.9573	
13	01/11/2000	-0.1000		-0.9771	
14	01/12/2000	-0.0900		-0.9908	
15	01/13/2000	-0.0800		-0.9983	
16	01/14/2000	-0.0700		-0.9998	
17	01/15/2000	-0.0600		-0.9950	
18	01/16/2000	-0.0500		-0.9842	
19	01/17/2000	-0.0400		-0.9672	
20	01/18/2000	-0.0300		-0.9444	
21	01/19/2000	-0.0200		-0.9156	
22	01/20/2000	-0.0100		-0.8813	
23	01/21/2000	0.0000		-0.8415	
24	01/22/2000	0.0100		-0.7965	
25	01/23/2000	0.0200		-0.7466	
26	01/24/2000	0.0300		-0.6921	
27	01/25/2000	0.0400		-0.6333	
28	01/26/2000	0.0500		-0.5707	
29	01/27/2000	0.0600		-0.5045	
30	01/28/2000	0.0700		-0.4352	
31	01/29/2000	0.0800		-0.3632	
32	01/30/2000	0.0900		-0.2890	
33	01/31/2000	0.1000		-0.2130	
34	02/01/2000	0.1100		-0.1356	
35	02/02/2000	0.1200		-0.0575	
36	02/03/2000	0.1300		0.0210	
37	02/04/2000	0.1400		0.0994	

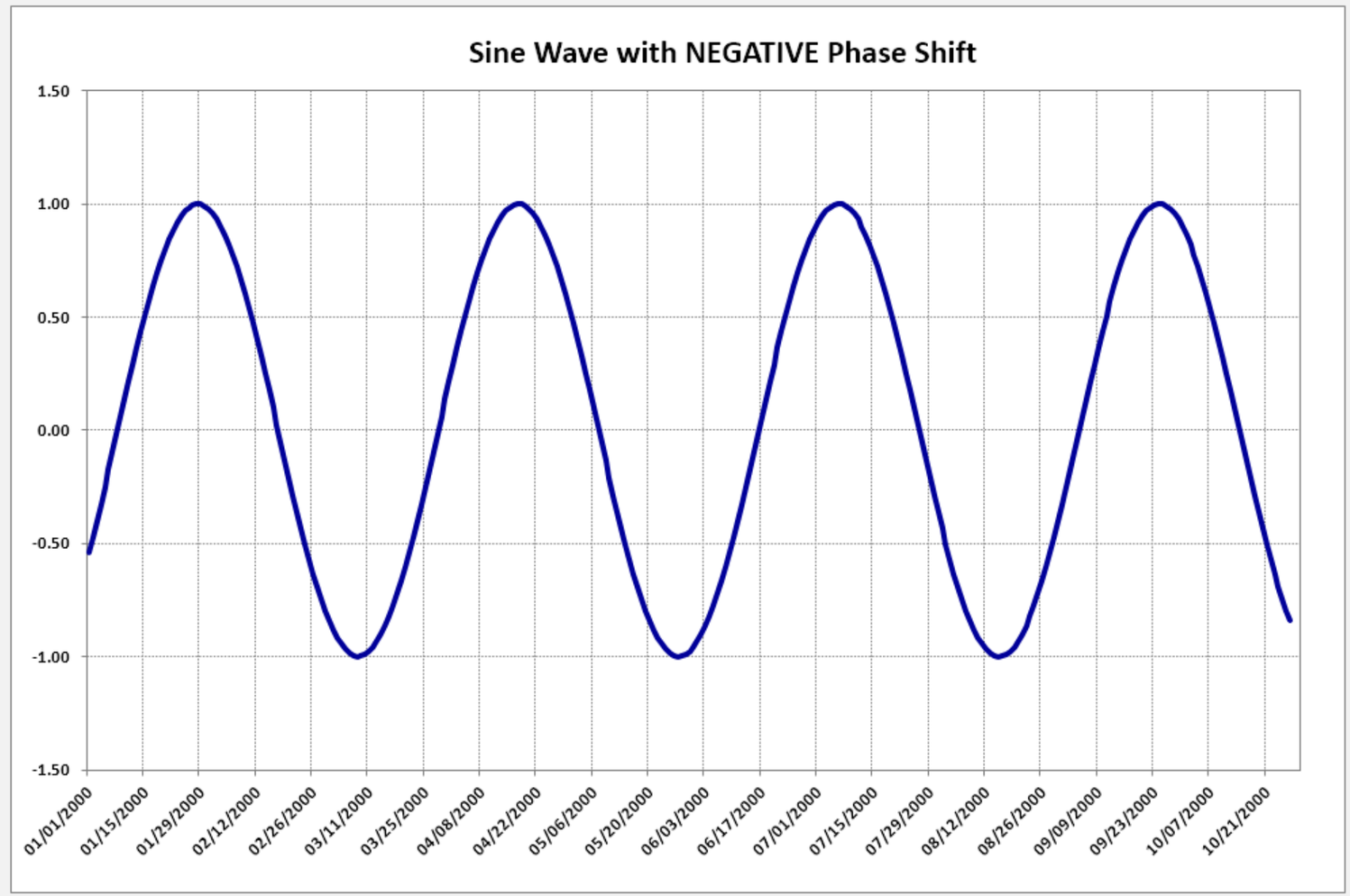
Frequency (f) = (1/T) x 100

Cycle Length in Days: 80 **Frequency (f): 1.2500** **=(1/H2)*100** **Dummy Start at Cycle Trough: -0.2000** **=ASIN(-1)/(2*PI()*$J$2)** **Phase Shift: 1.00**



P2 | -1

	A	B	C	D	E
1	Date	Dummy for Cycle Length 80		Sine Wave for Cycle Length 80	
2					
3	01/01/2000	-0.2000	=+$M$2	-0.5403	=+SIN((2*PI()*$J$2*B3)-$P$2)
4	01/02/2000	-0.1900	=+B3+0.01	-0.4726	=+SIN((2*PI()*$J$2*B4)-$P$2)
5	01/03/2000	-0.1800	=+B4+0.01	-0.4020	=+SIN((2*PI()*$J$2*B5)-$P$2)
6	01/04/2000	-0.1700	=+B5+0.01	-0.3289	=+SIN((2*PI()*$J$2*B6)-$P$2)
7	01/05/2000	-0.1600	=+B6+0.01	-0.2538	=+SIN((2*PI()*$J$2*B7)-$P$2)
8	01/06/2000	-0.1500		-0.1772	
9	01/07/2000	-0.1400		-0.0994	
10	01/08/2000	-0.1300		-0.0210	
11	01/09/2000	-0.1200		0.0575	
12	01/10/2000	-0.1100		0.1356	
13	01/11/2000	-0.1000		0.2130	
14	01/12/2000	-0.0900		0.2890	
15	01/13/2000	-0.0800		0.3632	
16	01/14/2000	-0.0700		0.4352	
17	01/15/2000	-0.0600		0.5045	
18	01/16/2000	-0.0500		0.5707	
19	01/17/2000	-0.0400		0.6333	
20	01/18/2000	-0.0300		0.6921	
21	01/19/2000	-0.0200		0.7466	
22	01/20/2000	-0.0100		0.7965	
23	01/21/2000	0.0000		0.8415	
24	01/22/2000	0.0100		0.8813	
25	01/23/2000	0.0200		0.9156	
26	01/24/2000	0.0300		0.9444	
27	01/25/2000	0.0400		0.9672	
28	01/26/2000	0.0500		0.9842	
29	01/27/2000	0.0600		0.9950	
30	01/28/2000	0.0700		0.9998	
31	01/29/2000	0.0800		0.9983	
32	01/30/2000	0.0900		0.9908	
33	01/31/2000	0.1000		0.9771	
34	02/01/2000	0.1100		0.9573	
35	02/02/2000	0.1200		0.9317	
36	02/03/2000	0.1300		0.9004	
37	02/04/2000	0.1400		0.8634	
38	02/05/2000	0.1500		0.8212	

Frequency (f) = (1/T) x 100

Cycle Length in Days: 80 **Frequency (f): 1.2500** **=(1/H2)*100** **Dummy Start at Cycle Trough: -0.2000** **=ASIN(-1)/(2*PI()*$J$2)** **Phase Shift: -1.00**