

**NOTE: These datasets are entirely independent of each other for the purposes of your exercise**

**Dataset 1**

**Dataset 2**

Name	pH_1984	pH_2001
Trout Lake (Route 8)	7.32	7.47
Dry Channel Pond	5.51	6.73
Middle Pond	6.90	6.75
Kiwassa Lake	6.90	6.74
Mt. Arab Lake	7.02	6.97
Nicks Pond	6.74	6.23
Partlow Lake	6.32	6.77
Zack Pond	6.83	7.21
Nate Pond	6.84	6.52
Gull Lakes (South)	5.01	5.06
Constable Pond	4.72	4.99
Unknown pond	6.81	7.37
Grass Pond	5.34	6.04
Long Pond	6.07	7.10
Whitney Lake	6.03	6.08
Fish Ponds (Northeast)	6.56	6.96
South Lake (East Branch)	5.22	5.84
St. John Lake	5.42	5.39
Oxbow Lake	7.18	7.01
Wilmurt Lake	6.41	6.52
Trout Lake	4.86	4.88

ANC Area 1 (micro eq/L)	ANC Area 2 (micro eq/L)
391.60	511.33
1.80	32.07
111.90	81.46
183.20	197.02
82.90	94.78
97.20	41.62
56.30	54.23
69.20	67.18
76.90	56.11
-28.10	0.87
-7.40	-0.69
238.40	206.90
7.30	18.61
18.20	49.13
11.40	12.44
161.20	54.53
0.50	4.43
1.80	0.78
140.90	138.72
30.00	45.83
-14.70	-9.01

Mud Lake	6.09	6.12
Chub Lake	5.21	5.36
Woods Lake	5.81	6.61
Nine Corner Lake	5.91	5.15
Guilford Lake	7.00	7.57
Riga Lake	5.23	5.07
No name (Snowflake Lake)	6.77	7.33
Little Butler Lake	7.13	6.86
Sly Lake	6.92	7.77
Hartley Pond	6.47	6.57
Cord Pond	7.13	8.46
Bassett Pond	7.10	7.55
Trout Lake	6.03	5.94
Barrett Pond	7.08	7.58
Wixon Pond	7.21	7.07
Twin Lakes	6.34	6.75
Ganoga Lake	4.76	4.80
Rock Hill Pond	6.33	6.15
No name (Wilson Creek Dam)	6.68	6.66
Mill Creek Reservoir	6.23	6.36
Island Pond	5.09	5.44
Penn Lake	5.83	5.84
East Stroudsburg Reservoir	6.84	7.18
Trout Lake	6.86	7.16
name (Bronson E Lockwood R	7.58	7.83
Iron Pond	6.87	6.67
Welhern Pond	7.06	6.65
Decker Ponds (Eastern)	7.14	6.76
Clear Pond	6.94	6.91

22.40	28.08
1.10	7.99
7.80	6.29
12.90	-6.30
342.70	371.31
-6.00	-8.25
245.80	221.11
342.20	229.04
190.90	227.25
218.50	148.91
380.80	296.00
376.40	408.81
30.40	16.29
275.30	361.21
332.50	354.36
33.30	77.95
-23.90	-10.19
52.90	75.89
	138.42
	25.76
	16.76
	12.90
	172.10
	183.11
	425.34
	91.79
	209.38
	194.74
	133.16

Quimby Pond	7.62	7.37
Hancock Pond	6.88	6.73
Drury Pond	6.95	6.86
Martin Meadow Pond	7.10	7.12
Black Pond	6.31	6.14
Hunt Pond	6.47	6.62
Upper Baker Pond	6.77	6.70
Trafton Pond	6.89	6.77
Upper Beech Pond	6.58	6.65
Pemigewasset Lake	6.45	6.68
Sunset Lake	6.50	6.78
Billings Pond	6.58	6.36
Turtle Pond	6.35	6.77
Long Pond	6.26	6.56
Mendums Pond	5.78	7.19
Smith Pond	6.77	6.62
Juggernaut Pond	5.46	6.21
Babbidge Reservoir	5.82	6.22
Darrah Pond	4.45	5.28
Sadawga Lake	6.86	6.70
Cranberry Pond	5.41	5.55
Pelham Lake	6.81	6.39
Lincoln Pond	4.54	5.23
Moore's Pond	6.33	6.14
Lake Wamponoag	5.06	5.51
Sand Pond	7.16	6.86
Nelson Pond	5.84	6.07
Brettuns Pond	7.32	7.06
Fairbanks Pond	6.58	6.51

	293.72
	97.32
	182.08
	286.76
	89.60
	71.72
	106.20
	148.39

Peabody Pond	6.65	6.85
Dykes Pond	5.29	5.11
Sandy Pond	6.90	6.80
Ashland Reservoir	6.87	7.02
Little Alum Pond	6.83	6.78
Stetson Pond	6.46	6.72
Long Pond	6.65	6.48
Round Pond	5.24	5.69
Little West Pond	5.73	6.76
Kings Pond	5.43	5.81
Spring Grove Pond	6.41	6.34
Rocky Pond	6.02	6.29
Killingly Pond	4.92	5.15
Ezekiel Pond	5.71	6.21
Little Sandy Pond	4.82	5.48
Little Quittacas Pond	6.69	6.71
Sandy Pond	5.04	5.01
Snows Pond	5.10	5.56
Upper Millpond	6.73	6.51
Robbins Pond	5.84	6.29
Goose Pond	6.57	6.26
Micah Pond	5.27	5.33
School House Pond	6.47	6.53
Middle Farms Pond	6.22	5.97
Togue Pond	7.41	7.52
Number Nine Lake	7.47	7.21
No name	7.23	5.84
No name	7.25	7.23
Bean Ponds (Middle)	6.74	6.72

Greenwood Pond	6.38	6.41
Little Greenwood Pond (West)	6.64	6.53
Lower Oxbrook Lake	6.64	6.36
Fourth Davis Pond	5.85	6.12
Duck Lake	6.63	6.49
Round Lake (07/23/2001)	7.17	6.47
Little Seavey Lake	6.75	6.14
Long Pond (07/23/2001)	6.99	6.17
Peep Lake	6.19	6.28
Nokomis Pond	7.23	6.95
Round Pond (07/21/2001)	7.40	7.62
Georges Pond	6.78	6.95
Great Pond	6.72	6.73
Craig Pond	6.97	6.40
Long Pond (07/22/2001)	5.83	6.35
Cain Pond	6.56	6.56
McClure Pond	6.33	6.61
Parker Pond	6.54	7.86
First Pond	6.64	6.27
Stevens Pond	6.74	6.72
Kalers Pond	6.33	6.25
Gross Pond	5.25	5.25

### Dataset 3

Duplicate ID	CEC (duplicate)	CEC (sample)
dup1r1	5.47	10.65
dup2r1	20.31	19.3
dup3r1	35.27	42.47
dup4r1	12.21	13.58
dup1r2	32.85	34.4
dup2r2	29.50	25.6
dup3r2	27.74	25.17
dup4r2	6.42	6.56
dup1r3	13.90	13.31
dup2r3	19.37	18.76
dup3r3	23.61	22.51
dup4r3	12.95	14.06
d1r4	15.43	12.48
d2r4	19.77	15.66
d3r4	12.05	11.64
d4r4	1.20	0.68
d1r5	12.17	13.76
d2r5	2.31	2.75
d3r5	17.10	18.02
d4r5	20.79	18.41
d1r6	32.54	33.06
d2r6	24.49	24.24

d3r6	7.39	8.78
d4r6	12.82	13.24