MATRIX A

STARTING VECTOR

60.140, -16.70, -18.30, 3.3200, -48.60	1.0000
154.80, -37.56, -62.80, 25.400, -131.7	1.0000
-174.4, 51.900, 65.340, -15.10, 149.70	1.0000
-185.7, 51.600, 73.300, -23.46, 157.10	1.0000
75.600, -28.10, -20.10, -4.140, -61.26	1.0000

Inverse iteration
The p value is 0
Number of decimal places = 4

not accurate enough!

Iter.	Eigenvector	Alpha
1	-.270193, -.739930, 1.000000, .9961808, -.392850,	4.824679
6	-.268048, -.754072, .9746563, 1.000000, -.347774,	.2373376
11	-.272774, -.756582, .9761512, 1.000000, -.353439,	.2391676
16	-.273686, -.757273, .9749401, 1.000000, -.353593,	.2379875
21	-.274430, -.757605, .9747811, 1.000000, -.354237,	.2375298
26	-.274777, -.757794, .9745806, 1.000000, -.354463,	.2372706

Eigenvalue nearest to 0 has value of 4.214596
Found in 26 iterations.
Corresponding eigenvector
(-.274777, -.757794, .9745806, 1.000000, -.354463)
****

Another eigenvalue can be found between -8 and 4 (I think is one) using inverse iteration with $p = \frac{1}{2}(-8+4) = -2$

you have looked from -4·2 to +4·2 already. Values still in ranges (approx)

+8 to +4, or -8 to -4

MATRIX A

STARTING VECTOR

60.140, -16.70, -18.30, 3.3200, -48.60	1.0000
154.80, -37.56, -62.80, 25.400, -131.7	.00000
-174.4, 51.900, 65.340, -15.10, 149.70	.00000
-185.7, 51.600, 73.300, -23.46, 157.10	.00000
75.600, -28.10, -20.10, -4.140, -61.26	.00000

Inverse iteration
The p value is -2
Number of decimal places = 6

ditto.

Iter.	Eigenvector	Alpha
1	-.318801, -.842437, .8913936, 1.000000, -.379445,	-3.41188

Eigenvalue nearest to -2 has value of -5.62748 = -5·62748 correct to 5 decimal places
Found in 34 iterations.
Corresponding eigenvector
(.4795319, .0083646, -.956799, -.092577, 1.000000)
****