

Andness	Symbol	Orness		
0%	0	D	1	100%
	1/16	D++	15/16	
12.5%	2/16	D+	14/16	87.5%
	3/16	D+	13/16	
25%	4/16	DA	12/16	75%
	5/16	D+	11/16	
37.5%	6/16	D-	10/16	62.5%
	7/16	D-	9/16	
50%	8/16	A	8/16	50%
	9/16	C-	7/16	
62.5%	10/16	C-	6/16	37.5%
	11/16	C+	5/16	
75%	12/16	CA	4/16	25%
	13/16	C+	3/16	
87.5%	14/16	C+	2/16	12.5%
	15/16	C++	1/16	
100%	1	C	0	0%

AnSy is a stand alone software product that is used for professional development (analysis and synthesis) of soft computing logic aggregation operators that are fundamental components of complex LSP criteria. It implements preferential neural networks, using an intuitive and efficient process of their training. The AnSy user can easily generate very precise soft computing logic aggregators that are necessary for creating quality decision criteria. AnSy can be used for all forms of partial conjunction, partial disjunction, conjunctive partial absorption and disjunctive partial absorption. The results of analysis and synthesis of aggregation operators are presented in the form of tables and graphs. A comprehensive AnSy

User Manual provides description of concepts used by soft computing aggregators, as well as detailed guidelines with many examples of the use of AnSy. In addition, AnSy includes a detailed online help.

**THE ANALYSIS OF PARTIAL ABSORPTION FUNCTION**

PA Neuron diagram showing inputs x and y, weights W1 and W2, and output z. The diagram shows x and y entering a box with weights W1 and W2, and output z. The box is labeled 'PA Neuron'.

```

Enter      x, y : .5 .8

Parameters: W1 = 0.25  W2 = 0.49  q = 2.000000  r = -3.000000
Inputs:    x = 0.50  y = 0.80
Result:    z = 0.577002
    
```

**SENSITIVITY ANALYSIS**

x	0.000	0.100	0.200	0.300	0.400	0.500	0.600	0.700	0.800	0.900	1.000
z	0.000	0.127	0.251	0.371	0.480	0.577	0.661	0.735	0.800	0.859	0.914

=====

y	0.000	0.100	0.200	0.300	0.400	0.500	0.600	0.700	0.800	0.900	1.000
z	0.300	0.316	0.356	0.407	0.457	0.500	0.534	0.559	0.577	0.590	0.600

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**ANSY help**

The following topics are available:

1. An introduction to preferential neurons and ANSY
2. GCD neurons: the generalized conjunction/disjunction
3. Exponents of weighted power means for various GCD neurons
4. PA neurons: the partial absorption function
5. An example of the GCD neuron synthesis: finding the exponent r
6. An example of the GCD neuron synthesis: finding all parameters
7. An example of the PA neuron synthesis: finding the weights
8. An example of the PA neuron synthesis: finding all parameters
9. The training of preferential neurons
0. Preferential neural networks
- E. Exit <CR or any input different from 0..9 causes exit>

Enter the identifier of selected topic: 1

For additional information please contact us at [info@seas.com](mailto:info@seas.com).