

CCOD

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Table of rules:

If X1=	Large	And X2=	Large	And X3=	Very small	And X4=	Very small	Then	Setosa
	Very large		Large		medium		medium		Versicola
	Very large		Large		Very large		Very large		Virginea

Membership Function for Very Small: $e^{\frac{-(x-0.143667)^2}{0.00385}}$

Membership Function for Small: $e^{\frac{-(x-0.318571)^2}{0.005069}}$

Membership Function for Medium: $e^{\frac{-(x-0.560488)^2}{0.002102}}$

Membership Function for Large: $e^{\frac{-(x-0.712558)^2}{0.002626}}$

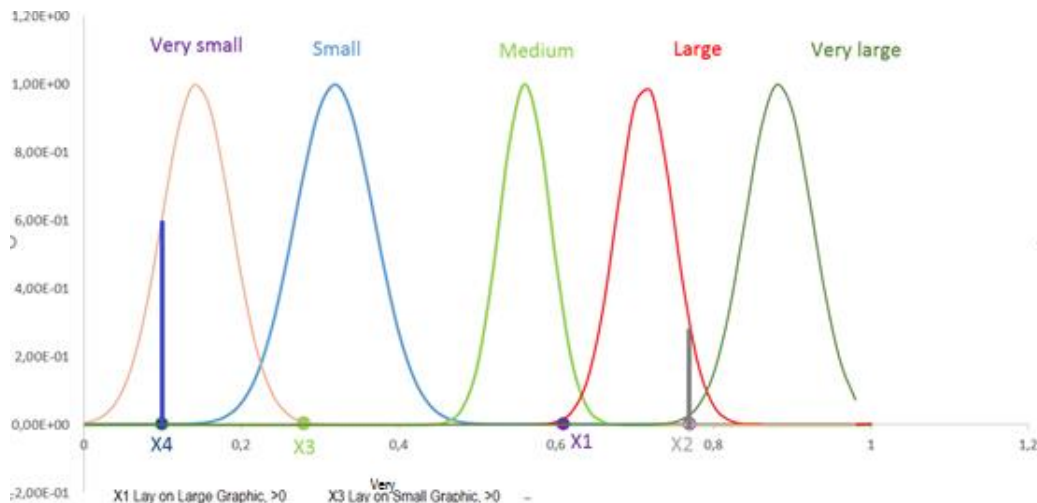
Membership Function for Very Large: $e^{\frac{-(x-0.88275)^2}{0.003615}}$

We would calculate here M and Y for values from column C

Iris Setosa: X1 = 0.61, x2 = 0.77, x3 = 0.28, x4 = 0.08

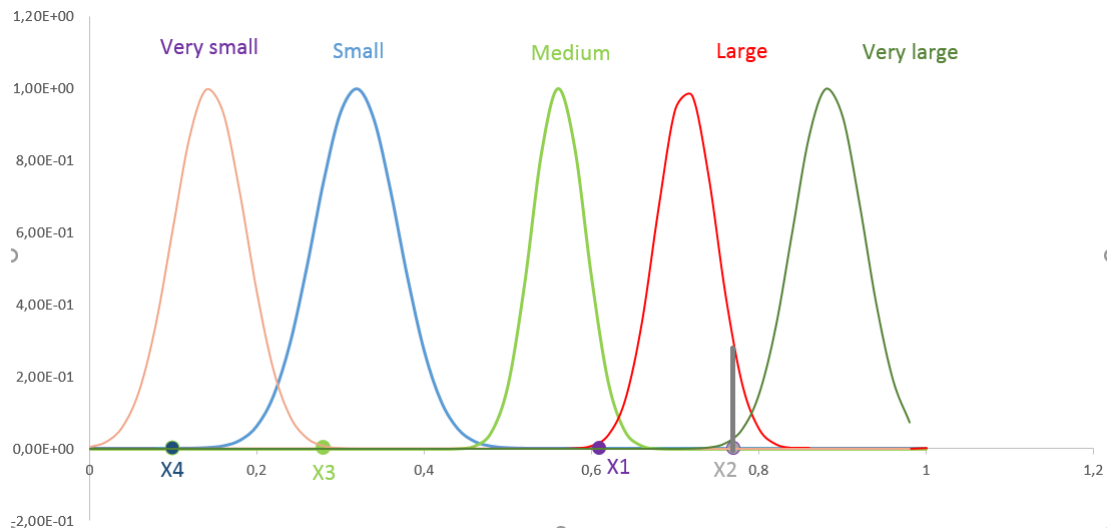
IF x1=Large AND x2=Large AND x3=Very Small AND x4=Very Small Then A

$$M_1 = 0.018217450100073515 * 0.2846506508158262 * 0.1442776848331453 * 0.34893378632011085 = 0.0002610609761133702$$



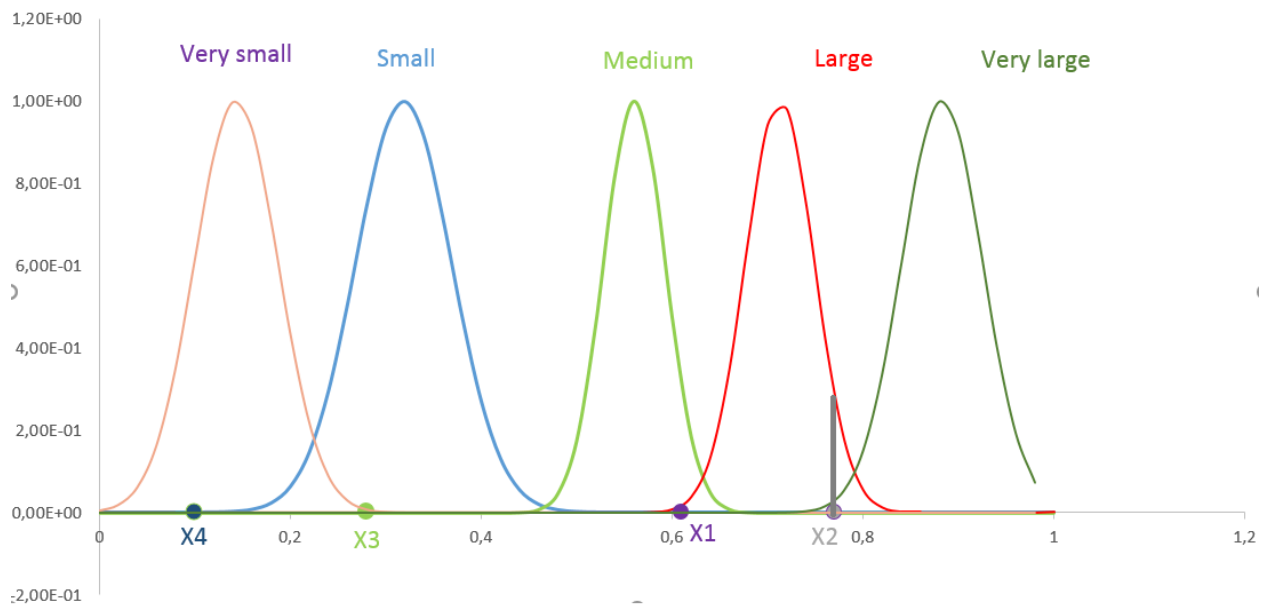
IF x1=Very Large AND x2=Large AND x3=Medium AND x4=Medium Then A

$$M_2 = 1.1549471416336851e^{-9} * 0.2846506508158262 * 2.7273967107226634e^{-23} * 2.0173743543404573e^{-48} = 1.808877253079833e^{-80}$$



IF x_1 =Very Large AND x_2 =Large AND x_3 =Very Large AND x_4 =Very Large Then A

$$M_2 = 1.1549471416336851e^{-9} * 0.2846506508158262 * 6.4703131246604396e^{-52} * 3.8159966380221206e^{-78} = 8.117224758062489e^{-139}$$



$$Y = 0.0002610609761133702 / 0.0002610609761133702 = 1$$