

(11) fuzzification - rank ordering

assign mem. values based on individual voting (poll / survey) "preference order"

best for where opinion is main influence

- what is the fav season
- what is the best color
- what is the best car company

Ex

$X = \{ \text{winter, spring, summer, fall} \}$

fuzzy set $a = \text{best season}$

100 - 37 ppl like S > W

2nd 37 ppl like winter > summer

	win	spri	sum	fall	Total	%	Rank
win	-	37	49	33	119	19.83	3
spri	63	-	90	81	234	39	1
sum	51	10	-	40	101	16.83	4
fall	67	19	60	-	146	24.33	2
Total = 100 ppl					600		

$$\frac{146}{600} \times 100\%$$

now

$$\mu_A(\text{spring}) = 1 \quad (\text{max } f, \text{rank})$$

$$\mu_A(\text{winter}) = \frac{19.83}{39} = 0.508$$

$$\mu_A(\text{summer}) = \frac{16.83}{39} = 0.431$$

$$\mu_A(\text{fall}) = \frac{24.32}{39} = 0.623$$