WS #14 - Log-Rank test
Math 150, Jo Hardin

Wednesday, March 26, 2025

Your Name: _____

Names of people you worked with: _____

What do you love about your major?

Task: Consider the chip melting data. Fill out the rest of the rows of Table 9.5 from your text.

Group 1 (milk chocolate)	35^+	30	60^+	45	25	55	30^+		
Group 2 (white chocolate)	45^+	35	48	64^+	72	42	55^+	43	62

time interval	n_j	number censored	d_j	d_{1j}	d_j/n_j	n_{1j}	n_{2j}	E_{1j}	V_{1j}
$[25, 30)$	16	0	1	1	1/16	7	9	7/16	0.246
$[30, 35)$	15	1	1	1	1/15	6	9	6/15	0.240
$[35, 42)$	13	1	1	0	1/13	4	9	4/13	0.213
$[42, 43)$	11	0	1	0	1/11	3	8	3/11	0.198
$[43, 45)$	10	0	1	0	1/10	3	7	3/10	0.210
$[45, 48)$	9	1	1	1	1/9	3	6	3/9	0.222
$[48, 55)$									
$[55, 62)$									
$[62, 72)$								0	0
$[72, 72)$								0	0

Solution:

time interval	n_j	number censored	d_j	d_{1j}	d_j/n_j	n_{1j}	n_{2j}	E_{1j}	V_{1j}
$[25, 30)$	16	0	1	1	1/16	7	9	7/16	0.246
$[30, 35)$	15	1	1	1	1/15	6	9	6/15	0.240
$[35, 42)$	13	1	1	0	1/13	4	9	4/13	0.213
$[42, 43)$	11	0	1	0	1/11	3	8	3/11	0.198
$[43, 45)$	10	0	1	0	1/10	3	7	3/10	0.210
$[45, 48)$	9	1	1	1	1/9	3	6	3/9	0.222
$[48, 55)$	7	0	1	0	1/7	2	5	2/7	0.204
$[55, 62)$	6	2	1	1	1/6	2	4	2/6	0.222
$[62, 72)$	3	1	1	0	1/3	0	3	0	0
$[72, 72)$	1	0	1	0	1/1	0	1	0	0