

ECE 376: Handout #16b

t-Test with Two Populations

The number of points the Vikings scored in the first six weeks are:

- Points Scored by Vikings: {23, 24, 28, 28, 29, 24}
- Mean = 26.00
- Standard Deviation = 2.61

The number of points the Packers scored in the first five weeks are:

- Points Scored by Packers: {7, 14, 22, 21, 9}
- Mean = 14.60
- Standard Deviation = 6.80

a) What is the probability that the Vikings will beat the Packers the next time they play?

- Vikings win a one-game series

a) What is the probability that the Vikings are the better team?

- Vikings win an infinite-game series

Student t-Table (area of tail)										
http://www.sjsu.edu/faculty/gerstman/StatPrimer/t-table.pdf										
p	0.25	0.20	0.15	0.10	0.05	0.025	0.01	0.005	0.001	0.0005
1	1	1.38	1.96	3.08	6.31	12.71	31.82	63.66	318.31	636.62
2	0.82	1.06	1.39	1.89	2.92	4.3	6.97	9.93	22.33	31.6
3	0.77	0.98	1.25	1.64	2.35	3.18	4.54	5.84	10.22	12.92
4	0.74	0.94	1.19	1.53	2.13	2.78	3.75	4.6	7.17	8.61
5	0.73	0.92	1.16	1.48	2.02	2.57	3.37	4.03	5.89	6.87
10	0.7	0.88	1.09	1.37	1.81	2.23	2.76	3.17	4.14	4.59

15	0.69	0.87	1.07	1.34	1.75	2.13	2.6	2.95	3.73	4.07
20	0.69	0.86	1.06	1.33	1.73	2.09	2.53	2.85	3.55	3.85
60	0.68	0.848	1.05	1.3	1.67	2	2.390	2.660	3.232	3.46
infinity	0.674	0.842	1.036	1.282	1.645	1.960	2.326	2.576	3.090	3.29

