

ECE 376: Handout #16

t-Test

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

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

a) What is the chance that the Vikings will score more than 30 points their next game?

b) How many points can the defense give up if the Vikings are to have a 95% chance of winning?

Student t-Table (Area of Tail)									
df \ p	0.1%	0.25%	0.5%	1%	2.5%	5%	10%	15%	20%
1	-636.6190	-318.3090	-63.6567	-31.8205	-12.7062	-6.3138	-3.0777	-1.9626	-1.3764
2	-31.5991	-22.3271	-9.9248	-6.9646	-4.3027	-2.9200	-1.8856	-1.3862	-1.0607
3	-12.9240	-10.2145	-5.8409	-4.5407	-3.1824	-2.3534	-1.6377	-1.2498	-0.9785
4	-8.6103	-7.1732	-4.6041	-3.7469	-2.7764	-2.1318	-1.5332	-1.1896	-0.9410
5	-6.8688	-5.8934	-4.0321	-3.3649	-2.5706	-2.0150	-1.4759	-1.1558	-0.9195
6	-5.9588	-5.2076	-3.7074	-3.1427	-2.4469	-1.9432	-1.4398	-1.1342	-0.9057
7	-5.4079	-4.7853	-3.4995	-2.9980	-2.3646	-1.8946	-1.4149	-1.1192	-0.8960
8	-5.0413	-4.5008	-3.3554	-2.8965	-2.3060	-1.8595	-1.3968	-1.1081	-0.8889
9	-4.7809	-4.2968	-3.2498	-2.8214	-2.2622	-1.8331	-1.3830	-1.0997	-0.8834
10	-4.5869	-4.1437	-3.1693	-2.7638	-2.2281	-1.8125	-1.3722	-1.0931	-0.8791
100	-3.3905	-3.1737	-2.6259	-2.3642	-1.9840	-1.6602	-1.2901	-1.0418	-0.8452