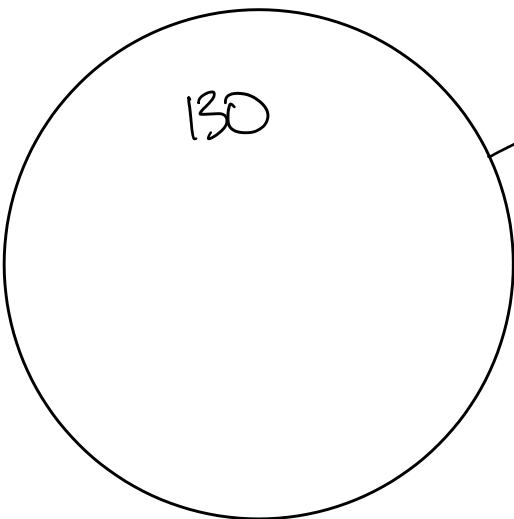


Question 4

Monday, September 17, 2018 11:40 AM

$H_0: \mu = 98.6^{\circ}\text{F}$

$H_a: \mu \neq 98.6^{\circ}\text{F}$



$\bar{x} = 98.58$
 $\sigma_{\bar{x}} = 0.449$

$\alpha = 0.05$

$$t = \frac{\bar{x} - \mu}{\frac{s_x}{\sqrt{n}}} = \frac{98.58 - 98.6}{\frac{0.449}{\sqrt{10}}} = -0.141$$

One-sided	75%	80%	85%	90%	95%	97.5%	99%	99.5%	99.75%	99.9%	99.95%
Two-sided	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.8%	99.9%
1	1.000	1.376	1.963	3.078	6.314	12.71	31.82	63.66	127.3	318.3	636.6
2	0.816	1.080	1.386	1.886	2.920	4.303	6.965	9.925	14.09	22.33	31.60
3	0.765	0.978	1.250	1.638	2.353	3.182	4.541	5.841	7.453	10.21	12.92
4	0.741	0.941	1.190	1.533	2.132	2.776	3.747	4.604	5.598	7.173	8.610
5	0.727	0.920	1.156	1.476	2.015	2.571	3.365	4.032	4.773	5.893	6.869
6	0.718	0.906	1.134	1.440	1.943	2.447	3.143	3.707	4.317	5.208	5.959
7	0.711	0.896	1.119	1.415	1.895	2.365	2.998	3.499	4.029	4.785	5.408
8	0.706	0.889	1.108	1.397	1.860	2.306	2.896	3.355	3.833	4.501	5.041
9	0.703	0.883	1.100	1.383	1.833	2.262	2.821	3.250	3.690	4.297	4.781
10	0.700	0.879	1.093	1.372	1.812	2.228	2.764	3.169	3.581	4.144	4.587

$z \approx 0.443$
 $0.443 > 0.05$

\therefore With this small sample we cannot reject H_0