Math 243 problem set

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Feb 25, 2014

23. (a) The sample mean is 98.24923 degrees Fahrenheit.
    (b) The standard error is 0.06341911
    (c) 98.6 degrees is over 5.5 standard errors away from the mean, making the folklore highly unlikely

24. (a) For group 1: 98.10462. for group 2: 98.39385.
    (b) The 95% confidence interval for group 1 is 98.1096 ± 0.1702. The 95% confidence interval for group 2 is 98.3975 ± 0.1751
    (c) This suggests that there is a difference in the population between men and women as neither group's confidence interval contains the mean of the other group.

25.
```
> r <- do (1000) * mean(~Temp,data=resample(normaltemp))
> favstats(r)
      min       Q1 median       Q3      max     mean        sd    n missing
 98.05846 98.20442  98.25 98.29538 98.46538 98.25024 0.0661687 1000       0
```