STAT 151A hw7

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D15.1

(a) Examine the distribution of the response variable. Based on this distribution, does it appear promising to model these data by linear least-squares regression, perhaps after transforming the response? Explain your answer.

```
States = read.table("~/Desktop/STAT 151A/STAT-151A/hw/hw6/States.txt")
summary(States)
```

```
##      region      population      satVerbal        satMath
## SA     : 9   Min.   :  481   Min.   :480.0   Min.   :473.0
## MTN    : 8   1st Qu.: 1423   1st Qu.:502.5   1st Qu.:500.0
## WNC    : 7   Median : 3699   Median :525.0   Median :521.0
## NE     : 6   Mean   : 5202   Mean   :531.9   Mean   :529.3
## ENC    : 5   3rd Qu.: 5966   3rd Qu.:564.5   3rd Qu.:557.0
## PAC    : 5   Max.   :31878   Max.   :596.0   Max.   :600.0
## (Other):11
##  percentTaking    percentNoHS      teacherPay
##  Min.   : 4.00   Min.   :13.40   Min.   :26.30
##  1st Qu.: 9.00   1st Qu.:19.90   1st Qu.:31.55
##  Median :30.00   Median :23.30   Median :35.00
##  Mean   :35.49   Mean   :23.78   Mean   :35.89
##  3rd Qu.:61.00   3rd Qu.:26.50   3rd Qu.:40.05
##  Max.   :80.00   Max.   :35.70   Max.   :50.30
##
```