



R Code for Examples in the book  
“Statistics: The Art and Science of Learning from Data”  
by Agresti, Franklin and Klingenberg, 5<sup>th</sup> edition

## Chapter 6

### Example 11: Test Scores that Use Different Scales – Comparing z-Scores

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#### Reading in SAT data

```
mean_SAT <- 500  
sd_SAT <- 100
```

#### To compute the z-Score of an SAT score of 650

```
z_SAT <- (650 - mean_SAT) / sd_SAT  
z_SAT  
## [1] 1.5
```

#### Reading in ACT data

```
mean_ACT <- 21.0  
sd_ACT <- 4.7
```

#### To compute the z-Score of an ACT score of 30

```
z_ACT <- (30 - mean_ACT) / sd_ACT  
z_ACT  
## [1] 1.914894
```