



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 10: Students Who Get B – Using z-Scores for Interval Probabilities

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To find the percentage of students that earn a B

```
pnorm(90, mean = 83, sd = 5) - pnorm(80, mean = 83, sd = 5)
```

```
## [1] 0.6449902
```

You can also use z-scores to compute the same percentage

```
z90 <- (90 - 83) / 5
```

```
z80 <- (80 - 83) / 5
```

```
pnorm(z90) - pnorm(z80)
```

```
## [1] 0.6449902
```