## **Notes and Study Guides**

## **Notes**

- Basic Terminology<sup>1</sup>
- Visualizing Variables<sup>2</sup>
- Percentiles<sup>3</sup>
- Measures of Center<sup>4</sup>
- Measures of Spread<sup>5</sup>
- Linear Transformations<sup>6</sup>
- Density Curves<sup>7</sup>
- The Normal Distribution<sup>8</sup>
- Relationships between two variables<sup>9</sup>
- Scatterplots and Correlation<sup>10</sup>
- General Theory on Modeling and Data Fitting<sup>11</sup>
- Linear Models and Regression Lines<sup>12</sup>
- The question of causation <sup>13</sup>
- Introduction to Probability<sup>14</sup>
- Probability rules<sup>15</sup>
- Conditional Probability<sup>16</sup>
- Independent Events<sup>17</sup>
- Tree Diagrams 18
- Random Variables<sup>19</sup>
- The Binomial Setting and Distribution<sup>20</sup>
- Mean and Standard Deviation of Random Variables<sup>21</sup>
- Combining Random Variables<sup>22</sup>

<sup>&</sup>lt;sup>1</sup>notes/basic\_terminology.html

<sup>&</sup>lt;sup>2</sup>notes/visualizing\_distributions.html

<sup>&</sup>lt;sup>3</sup>notes/percentiles.html

<sup>&</sup>lt;sup>4</sup>notes/measures\_center.html

<sup>&</sup>lt;sup>5</sup>notes/measures\_spread.html

<sup>&</sup>lt;sup>6</sup>notes/linear transformations.html

<sup>&</sup>lt;sup>7</sup>notes/density curves.html

<sup>&</sup>lt;sup>8</sup>notes/normal distribution.html

<sup>&</sup>lt;sup>9</sup>notes/relationships.html

<sup>&</sup>lt;sup>10</sup>notes/scatterplot\_correlation.html

<sup>&</sup>lt;sup>11</sup>notes/modeling\_general.html

<sup>&</sup>lt;sup>12</sup>notes/linear\_regression.html

<sup>&</sup>lt;sup>13</sup>notes/correlation\_causation.html

<sup>&</sup>lt;sup>14</sup>notes/probability\_intro.html

<sup>&</sup>lt;sup>15</sup>notes/probability\_rules.html

<sup>&</sup>lt;sup>16</sup>notes/probability conditional.html

<sup>&</sup>lt;sup>17</sup>notes/independent\_events.html

<sup>&</sup>lt;sup>18</sup>notes/decision\_trees.html

<sup>&</sup>lt;sup>19</sup>notes/random variables.html

<sup>&</sup>lt;sup>20</sup>notes/binomial.html

<sup>&</sup>lt;sup>21</sup>notes/rv\_mean.html

<sup>&</sup>lt;sup>22</sup>notes/rv\_combine.html

- Mean and Standard Deviation of the Binomial<sup>23</sup>
- Binomial: Approximating by Normal<sup>24</sup>
- The Sample Mean / IID Setting<sup>25</sup>
- Inference I: Confidence Intervals<sup>26</sup>
- Inference II: Hypothesis Tests<sup>27</sup>

## **Study Guides**

- Midterm 1 study guide<sup>28</sup>
- Midterm 2 study guide<sup>29</sup>
- Final study guide<sup>30</sup>

<sup>&</sup>lt;sup>23</sup>notes/binomial\_mean.html

<sup>&</sup>lt;sup>24</sup>notes/binomial\_mean.html

<sup>&</sup>lt;sup>25</sup>notes/iid\_setting.html

<sup>&</sup>lt;sup>26</sup>notes/confidence\_intervals.html

<sup>&</sup>lt;sup>27</sup>notes/hypothesis\_tests.html

<sup>&</sup>lt;sup>28</sup>notes/midterm1\_study\_guide.html

<sup>&</sup>lt;sup>29</sup>notes/midterm2\_study\_guide.html

<sup>&</sup>lt;sup>30</sup>notes/midterm3\_study\_guide.html