1. Uniform Distribution

1. $E(x) = 7.5$

2. $4/15$

3. 0

4. $4/15$

5. $8/15$

2. Standard Normal Distribution

1. 0.05938

2. 0.07215

3. 0.2435

4. 0.3457

5. 0.5

6. 0.9901

7. 0.9901

3. Normal Distribution

1. 0.3413

2. 0.0026

3. 0.3830

4. Linear Combination of Random Variables

1. $E(T) = 48, \sigma(T) = 1.0770$

2. 0.03166

6. Other Continuous Distributions...

2. 0.74071

3. 0.02496

4. 0.4815

5. $\mu = 1.1107, \sigma = 0.5806$

7. Joint Probability Functions

1. $c = 1/4$

5. $\frac{3}{8}(e^{-2} - e^{-3})$ and $\frac{e^{-1}}{2} - e^{-3}$.