

The University of Portland  
Donald P. Shiley School of Engineering

EGR361  
Analysis of Engineering Data

**HOMEWORK 4—Continuous & Discrete Random Variables & Probability: Normal and Binomial Distributions**

**Assigned:** Thursday, February 9, 2017  
**Due:** Wednesday, February 15, 2017  
**Text:** 3-4, 3-5, 3-7, 3-8  
**Midterm Exam:** Monday, February 20, 2017 (closed-book, 1 crib-sheet, calculator)

**Problems:**

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|---------------------------|----------------------------|
| 1) Text, 3-21 (page 72)   | 2) Text, 3-22 (page 72)    |
| 3) Text, 3-25 (page 72)   | 4) Text, 3-33 (page 73)    |
| 5) Text, 3-46 (page 90)   | 6) Text, 3-50 (page 90)    |
| 7) Text, 3-93 (page 101)  | 8) Text, 3-98 (page 101)   |
| 9) Text, 3-106 (page 108) | 10) Text, 3-111 (page 108) |

**Resources for further reading:**

<https://www.mathsisfun.com/data/random-variables-continuous.html>

<https://www.mathsisfun.com/data/standard-normal-distribution.html>

[https://www.probabilitycourse.com/chapter3/3\\_1\\_3\\_pmf.php](https://www.probabilitycourse.com/chapter3/3_1_3_pmf.php)

<https://www.mathsisfun.com/data/binomial-distribution.html>