

**HOMEWORK 5**  
**PROB. AND STAT. FOR ENG. (STAT:2020; BOGNAR)**

**NAME:** \_\_\_\_\_

*Print this pdf file, write your answers in the provided space, scan pages (in order) into a single pdf file, upload file to Gradescope. You may also use an iPad.*

1. Textbook 4.2

2. Textbook 4.4

3. Textbook 4.7

4. Textbook 4.34

5. Textbook 4.35 — Find the variance using:

(a) the definition  $Var(X) = E[(X - \mu)^2]$

(b) the computational formula  $Var(X) = E(X^2) - [E(X)]^2$

6. Textbook 5.8

(a)

(b)

7. Textbook 5.12

8. Textbook 5.15

(a)

(b)

(c)

9. Textbook 5.26 – (a) only

(a)