

## Homework 07-08

Due August 24, 2020

- Exercises 4.7.3 and 4.7.5 (Page 128)
- Review exercise 27 (page 132)
- Supplement exercise. Based on a survey conducted in 1988 – 1994, the distribution of height of males in the 20 – 29 age bracket (U.S. Census Bureau 1999) has the mean 69.3 (inches) and standard deviation 2.92 and follows a normal distribution reasonably well.
  - If a male is picked at random from that population, what is the probability that  
(1) he is higher than 71 inches, (2) his height is somewhere between 67 and 69 inches?
  - If 10 males were picked at random, (3) what is the probability that at least 5 of them are higher than the average height and (4) what is the probability that at least 5 of them are higher than 71 inches?

(hint: you need to use both normal and binomial distributions)
- Exercises 5.3.8 (Page 145, 10<sup>th</sup> Ed)