Homework Solutions
Chapter 7 – Page 489

Exercise 104(a)(b)

(a) The probability is `normalcdf(240,E99,190,20)` = 0.0062.

(b) The probability is `normalcdf(-E99,200,190,20)` = 0.6915.

(c) Do not do part (c). The answer is given by the quotient of the two probabilities, but we have not talked about that. You could find that $P(Y > 240) = 0.0062$ (part (a)) and that $P(Y > 200) = 0.3085$ (from part (b)) and then compute

$$P(Y > 240 | Y > 200) = \frac{P(Y > 240)}{P(Y > 200)} = \frac{0.0062}{0.3085} = 0.0201.$$