1) Probability to draw a king on the first draw: P(A) = 4/52
   Probability to draw a queen on the second draw: P(B) = 4/51

2) Students in Actuarial: P(A) = 95/300
   Students in Data Science: P(B) = 120/300
   Students in neither Actuarial or Data Science: 1 - (P(A) + P(B)) = 85/300

3) 10 - 99 has 90 numbers
   18 of those numbers are multiples of 5
   P(A) = 18/90

4) $P(S|W_1)P(S|W_2)P(S^C|W_3)$ + -> ⅖ * ⅕ * ⅞ -> 14/200
   $P(S|W_1)P(S^C|W_2)P(S|W_3)$ + -> ⅖ * ⅘ * ⅛ -> 8/200
   $P(S^C|W_1)P(S|W_2)P(S|W_3)$ + -> ⅗ * ⅕ * ⅛ ->3/200
   $P(I|W_1)P(I|W_2)P(I^C|W_3)$ + -> ⅕ * ⅕ * 1 -> 8/200
   $P(M|W_1)P(M|W_2)P(M^C|W_3)$ + -> ⅖ * ⅕ * ⅞ -> 14/200
   $P(M|W_1)P(M^C|W_2)P(M|W_3)$ + -> ⅖ * ⅘ * ⅛ -> 8/200
   $P(M^C|W_1)P(M|W_2)P(M|W_3)$ + -> ⅗ * ⅕ * ⅛ -> 3/200
   $P(T^C|W_1)P(T|W_2)$ $P(T|W_3)$ + -> 1 * ⅕ * ⅛ -> 5/200
   $P(H^C|W_1)P(H|W_2)P(H|W_3)$ -> 1 * ⅕ * ⅛ -> 5/200
   = 68/200

5) Probability of A hitting = 0.7
   Probability of B hitting = 0.8
   Probability of C hitting = 0.9
   a) At least one hit: 1 - $(P(A^C)P(B^C)P(C^C))$ = 0.994
   b) A miss, B hit, and C miss: $P(A^C)P(B)P(C^C)$ = 0.024

6) Probability of A on Midterm: P(A) = 17/35
   Probability of A on Final: P(B) = 14/35
   Probability of no A on both tests: P(C) = 11/35
   Probability of A on both tests: P(A) + P(B) - $P(C^C)$ = 7/35