**Statistical mathematics - Assignment 4**

1. a) A = {0, 1, 2}

b) B = {2, 3}

c) C1 = {3, 4, 5} C2 = {2, 3}

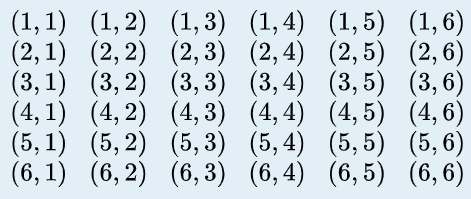
d) D = {0, 1, 2, 3, 4, 5}

e) E = ∞

1. a)

b) Pwin = P(299) + P(199) + P(99) = 0.003

1. a) RX = {2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12}

b)

1. a) Not valid: Probability cannot be negative.

b) Not valid: The sum of all probabilities equals 0.895.

c) Valid.