

Casey Levy

CS 225: Discrete Structures in CS

Quiz – Week 8

#3a.

$n = 3$ different kinds of jelly beans, $r = 6$ chosen at random $= 3^6$

b.

$$C(10, 0) + C(10, 1) + C(10, 2) + C(10, 3)$$

c.

$$C(10, 7) + C(10, 8) + C(10, 9) + C(10, 10)$$

#4.

$r = 20$ coins to be chosen, $n = 5$ kinds of coins. $C(20+5-1, 20) = C(24, 20)$

#5a.

$$C(7, 3) = \frac{7!}{3!(7-3)!}$$

b.

$$C(6, 4) \times C(7, 3) + C(6, 5) \times C(7, 2) + C(6, 6) \times C(7, 1)$$