

### Solutions to More Practice Problems

1. See handwritten solution.
2.
  - a.  $C(5,3) 26^3 = 175,760$
  - b.  $C(4,2) 26^2 + C(4,3) 26^3 = 74,360$
3.
  - a.  $1/C(8,5) = 1/56$
  - b.  $C(3,1) C(5,4) / C(8,5) = 15/56$
  - c.  $1 - 1/C(8,5) = 55/56$
4.
  - a.  $C(3,3) C(5,3) / C(8,6) = 5/14$
  - b.  $C(3,2) C(5,4) / C(8,6) = 15/28$
  - c. 0
5.
  - a. 4 to 7
  - b. 3 to 5
  - c. 1 to 2
6.  $36^8 - 26^8 - 10^8 = 2,612,182,842,880$
7.  $C(7,3) (.4)^4 (.6)^4 \approx 0.116$