

**12.1A WORKSHEET**

**1-4: Each event can occur in the given number of ways. Find the number of ways all of the events can occur.**

1) Event 1: 2 ways, Event 2: 4 ways

2) Event 1: 6 ways, Event 2: 1 way

3) Event 1: 7 ways, Event 2: 3 ways

4) Event 1: 2 ways, Event 2: 5 ways,  
Event 3: 3 ways

**5-8: For the given configuration, determine how many different computer passwords are possible if (a) digits and letters can be repeated, and (b) digits and letters cannot be repeated.**

5) 4 digits followed by 2 letters

6) 5 digits followed by 1 letter

a)

b)

a)

b)

7) 4 letters followed by 2 digits

8) 5 letters followed by 1 digit

a)

b)

a)

b)

**9-12: For the given configuration, determine how many different 5-digit postal zip codes are possible if (a) digits can be repeated, and (b) digits cannot be repeated.**

9) Begins with a 4

10) Has all even digits

a)

b)

a)

b)

11) Is divisible by 2

12) Ends with a 6

a)

b)

a)

b)