Intro to Geometry (HSS-CP.A.1)
Unit Six: Probability – Review (HW5)

Name: _____
Date: _____ Period: _____

1. Why does the relationship P(A) + P(B) = P(A or B) work only for mutually exclusive events?

2. Timothy is asked to determine the P(iPod or iPhone). He adds the column P(iPad) = 30/72 to the row P(iPhone) = 55/72 and gets 85/72. Because this number exceeds 1 he knows that he has done something wrong. What did he do wrong? What should the correct answer be?

	iPad	Not iPad	Total
iPhone	25	30	55
Not iPhone	5	12	17
Total	30	42	72

3. Use the two way frequency table to determine the probabilities.

a) P(Red or Green) = _____ b) P(Yellow) = _____

c) P(Male or Green) = _____ d) P(Male) = _____

e) P(Black) = _____

	Red	Green	Blue	Yellow	Total
Male	15	9	11	2	37
Female	8	12	6	7	33
Total	23	21	17	9	70

4. Given a jar of cookies with 5 chocolate chip, 3 oatmeal, and 2 peanut butter cookies in it, determine the following probabilities.

a) Getting an oatmeal cookie and then a chocolate chip cookie **without** replacement.

b) Getting two chocolate chip cookies **without** replacement.

c) Getting a peanut butter cookie or an oatmeal cookie.

P(O and CC) = _____ P(CC and CC) = _____ P(PB or O) = _____

5. Given two bags of marbles, bag #1 with 2 green, 3 red and 7 orange, and bag #2 with 5 green, 1 red and 4 orange. Determine the following probabilities.

a) Getting an orange from bag #1 and then getting a green from bag #2.

P(O1 and G2) = _____

b) Getting a red from bag #1 and then getting a red from bag #1 **without** replacement.

P(R1 and R1) = _____

c) Getting a green from bag #1 and then getting a green from bag #2.

P(G1 and G2) = _____

6. Using the marble bags in question #8, what would P(Green and Green) be if the person picked from bag #1 and then placed that marble into bag #2 and then picked from bag #2?

7. Given a standard deck of cards. Determine the probabilities.

a) Getting a red card and then a red card **without** replacement.

P(Red and Red) = _____

b) Getting a face card and then a 5 **without** replacement.

P(Face and 5) = _____

c) Getting a 2 and then a 2 **without** replacement.

P(2 and 2) = _____

d) Getting two black face cards **without** replacement.

P(B Face and B Face) = _____

e) Getting a red card or a black king.

P(red or black king) = _____

f) Getting a face card or a diamond.

P(face card or diamond) = _____