SECONDARY MATH II
DOMAIN 4 STANDARD S.CP.2
INDEPENDENT PROBABILITY PAGE 2

NAME_____
DATE_____
CLASS_____

1. You have an equally likely chance of choosing an integer from 1 to 50. Find the probability of each of the following events.
   - a. P(An even number)
   - b. P(A perfect square)
   - c. P(A factor of 150)
   - d. P(A two digit number)
   - e. P(A multiple of 4)
   - f. P(A number less than 35)
   - g. P(A prime number)
   - h. P(A perfect cube)

2. You randomly chose two marbles, replacing the first marble before drawing again, from a bag containing 10 black, 8 red, 4 white, and 6 blue marbles. Find the probability of each of the following marble drawing events.
   - a. P(White, then red)
   - b. P(Not red, then blue)
   - c. P(Green, then green)
   - d. P(Blue or black, then white)

3. Drawing a card from those on the right, what is:
   - a. P(even or shaded)
   - b. P(White or odd)
   - c. P( < 4 or shaded)
   - d. P( > 5 or shaded)
   - e. P(factor of 10 or white)
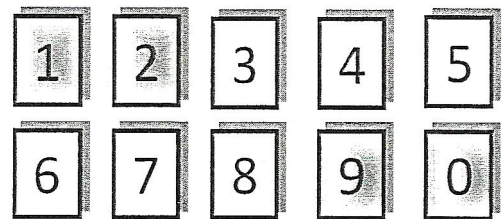
   

4. Answer the following questions based on the Venn Diagram below
   - a. P(girls)
   - b. P(sports, not girls)
   - c. P(not sports)
   - d. P(not sports, not girls)
   - e. P(girls and sports)
   - f. P(Coach Prince's Class)
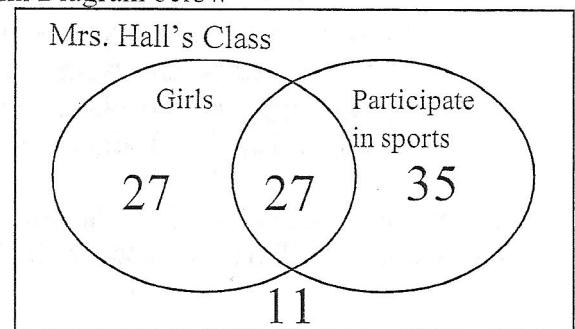
   

5. Use the following 2-way frequency table to answer the following questions. You will need to *find the margin totals* before answering your questions.

| | Brown hair | Blonde hair | Red hair | Black hair | Other hair | TOTAL |
|---|---|---|---|---|---|---|
| Male | 42 | 11 | 3 | 17 | 27 | |
| Female | 47 | 16 | 13 | 9 | 15 | |
| TOTAL | | | | | | |

   - a. P(male)
   - b. P(red hair)
   - c. P(other hair)
   - d. P(blonde hair ∩ male)
   - e. P(black hair and female)
   - f. P(brown hair ∩ not male)
   - g. P(female ∩ not other hair)
   - h. P(not female ∩ not male)
   - i. P(red hair and black hair