Algebra 2B   Name: _____

Beginners Probability

1)   The Swimming team is having a raffle to raise money. They sold tickets to ERHS
      students ONLY and kept track of what grade each student was in.   They will only draw
      one winning ticket for $1,000!!!!

Seniors	540 tickets	Sophomores	285 tickets
Juniors	138 tickets	Freshman	37 tickets

   a.   What is the probability that the winning ticket will be a Freshman?

   b.   Find P(Sophomore).

   c.   Find P(NOT Senior).

   d.   Find P(Freshman or Sophomore).

   e.   Find P(Mrs. Maurer ☺).

   f.   Find P(ERHS student)

**NOTE: In this Probability Unit you will be expected to know the meanings of these terms,
so be sure to study them if you have forgotten:**
Prime number: Has exactly two factors, 1 and itself. (examples: 2, 3, 5, 7, 11,…)
Factor: A number that divides into another number nicely. (Factors of 8 are 1, 2, 4, 8)
Multiples: The list you get when you count by a certain number. (Multiples of 4 are 4, 8, 12, 16…)

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2)   Assume that you roll a fair die. (All numbers 1 – 6 are equally likely to be rolled.) Find
      each probability.

   a.   P(Three)   b.   P(Two or Five)

   c.   P(Even Number)   d.   P(Factor of Six)

   e.   P(Multiple of 3)   e.   P(Prime number)

3)   A spinner numbered 1-12 with all sections the same size is spun one time.
      Find each probability.

      a.   P(Even Number)   b.   P(Multiple of Four)

      c.   P(NOT 5)   d.   P(1 or 5 or 7)

      e.   P(Factor of 12)   f.   P(prime number)

Playing Cards:
There are 52 cards in a standard deck of playing cards.
There are 13 cards in each suit. (Ace – King)
There are four suits: Hearts, Diamonds, Spades, Clubs
A "face" card is a card with a face on it, i.e. Jacks, Queens, and Kings

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4)   Assume that one card is drawn at random from the deck. Find each probability.

      a.   P(Queen of Diamonds)   b.   P(Any Queen)

      c.   P(Spade)   d.   P(NOT a Club)

      e.   P(4 of Hearts or a Diamond)   f.   P(Ace or a Jack)

      g.   P(face card)   h.   P(Ace or a club)