Math 141 – Spring 2004   Name: _____Answers_____
Quiz #2
Section 2.1   _____   Seat: _____
                                         15
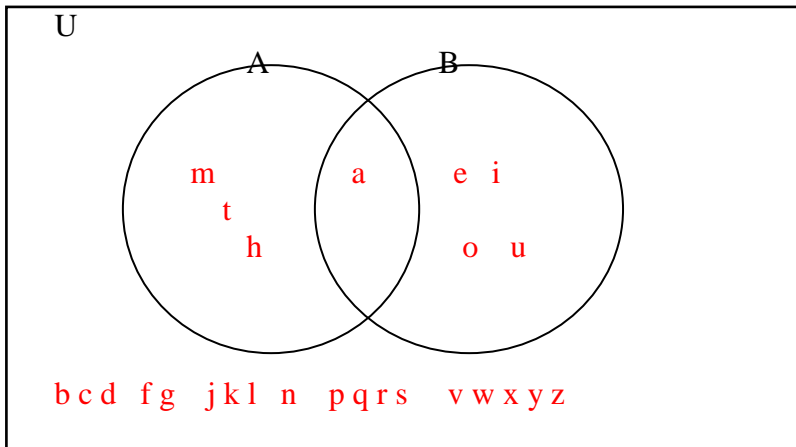
1. Given the sets A = {m, a, t, h}, B = {a, e, i, o, u}, and
   the Universal set U = {x | x ∈ English alphabet}:
   4pts
   a. Fill in the Venn diagram to represent these sets by listing the elements in the appropriate part of
      each set.

   1pt   1pt _
   b. A ∩ B = {   a   }   d. B = { all the consonants; all letters that are not vowels }

   1pt   1pt
   c. B − A = { e, i, o, u   }   e. How many elements are in the set A X B ? _20_____
   3pt   n(A) = 4 and n(B) = 5 so n(A X B) = 20
2. List all the subsets of set {1, 2, 3}
     { }   { 1 }   {1, 2 }
   {1, 2, 3 }   { 2 }   {1, 3 }
                { 3 }   {2, 3 }
   4pts
3. Shade the Venn diagram to illustrate the set: (Clearly indicate your answer by shading.)
         _   _
      a. Y   b. [(X ∩ Y) ∪ Z].