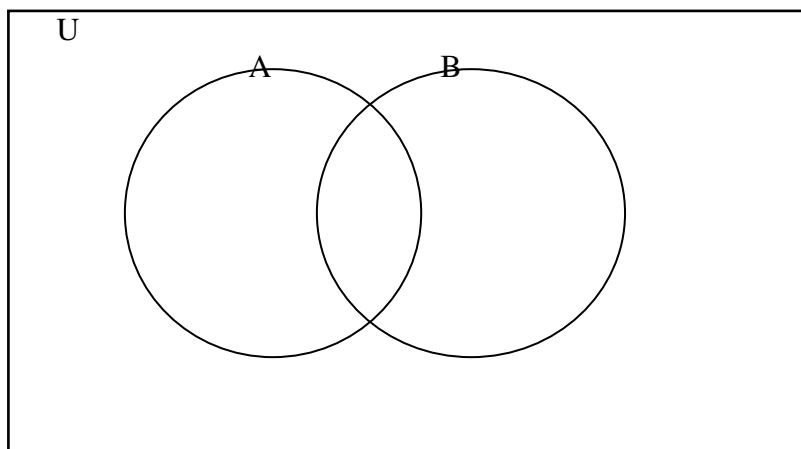


1. Given the sets $A = \{m, a, t, h\}$, $B = \{a, e, i, o, u\}$, and the Universal set $U = \{x \mid x \in \text{English alphabet}\}$:

4pts

- a. Fill in the Venn diagram to represent these sets by listing the elements in the appropriate part of each set.



1pt

b. $A \cap B = \{ \quad \quad \quad \}$

1pt

d. $B = \{ \quad \quad \quad \}$

1pt

c. $B - A = \{ \quad \quad \quad \}$

1pt

e. How many elements are in the set $A \times B$? _____

3pt

2. List all the subsets of set $\{1, 2, 3\}$

4pts

3. Shade the Venn diagram to illustrate the set: (Clearly indicate your answer by shading.)

a. \bar{Y}

b. $[(X \cap \bar{Y}) \cup Z]$.

