Problem 1: Determine the validity of the given argument by constructing a Venn Diagram:

- All poets are eloquent.
- Some poets are wine connoisseurs.
- Therefore, some wine connoisseurs are eloquent.

Problem 2: Draw the negation chart:

Problem 3: Write the negations of the following statements:

a. Some of the beverages contain caffeine.

b. Some of the beverages do not contain caffeine.

Problem 4: Using the symbolic representations:

- $p$: A person plays the guitar.
- $q$: A person rides the motorcycle.
- $r$: A person wears a leather jacket.

express the following compound statements in symbolic form:

a. A person wears a leather jacket and doesn’t play the guitar or ride a motorcycle.

b. All motorcycle wearers wear leather jackets.

Bonus: Write down a paradoxical statement (that was not previously mentioned in class).