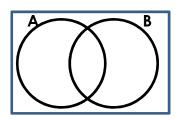
| Name: Date: | | | | |
|---------------|-------------------------|--|---|-------------|
| Set Notation | Pronunciation | Meaning | Venn Diagram | Answer |
| $A \cup B$ | "A union B" | Everything in both sets; to unite; Used in OR problems | A B A A | {1, 2, 3} |
| $A \cap B$ | "A intersect B" | Only what is in common with both sets; Used in AND problems | 1 2 3 | {2} |
| A or A' | "A complement" | Everything NOT in set A | | {3, 4} |
| $(A \cup B)'$ | "not A union B" | Everything NOT in set A and set B | A A A A A A A A A A A A A A A A A A A | {4 } |
| $(A \cap B)'$ | " not A intersect B" | Everything NOT in common between set A and set B | $\begin{array}{c c} \hline A \\ \hline 1 \\ \hline 2 \\ \hline 3 \\ \hline \end{array}$ | {1, 3, 4} |

Name: _____ Date: _____

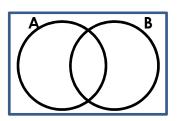
Using Venn Diagrams

Shade in the appropriate area of the Venn Diagram.

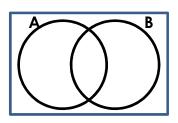
1. $A \cap B$



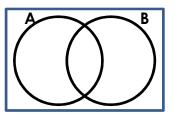
4. $A \cap B'$



2. $A \cup B$

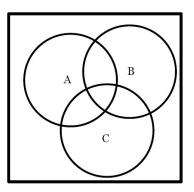


5. $(A \cup B)'$



6. $B \cup C$

3. A'



Mr. Grisham took a poll of his student's favorite type of weather. The students had the choice of hot, cold, and/or rain/snow. The results are displayed in the Venn Diagram. Write your answer as a reduced fraction.

- 6. Find P(Cold).
- _____7. Find P(Warm)'.
- 8. Find P(Cold \cap Warm).
- _____ 9. Find P(Warm \cap Rain).
- _____10. Find P(Warm \cap Cold \cap Rain).
- 11. Find P(Cold \cup Warm).

