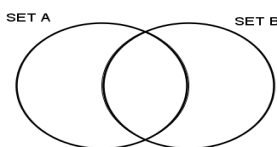# Student Activity: To investigate 2 Venn Diagrams

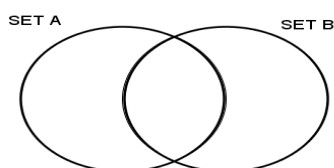**Use in connection with the interactive file, 'Venn Diagrams', on the Student's CD.**
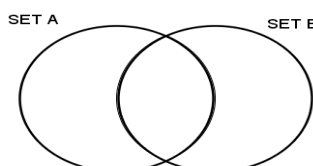
Note A^c = A'.

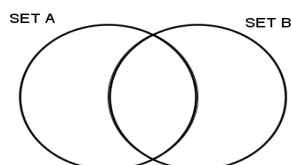1. In the diagram below, shade in the area that represents the set A.

2. In the diagram below, shade in the area that represents the set B.
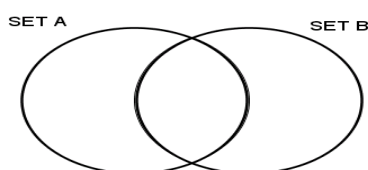
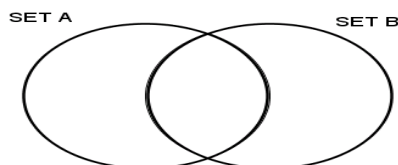3. In the diagram below, shade in the area that represents A $\cap$ B.

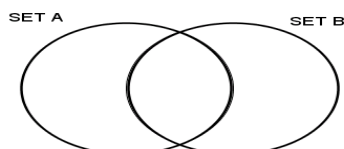4. In the diagram below, shade in the area that represents A U B.

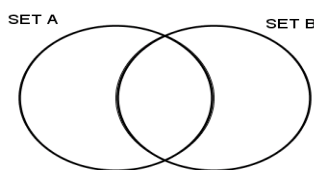5. In the diagram below, shade in the area that represents A^c.

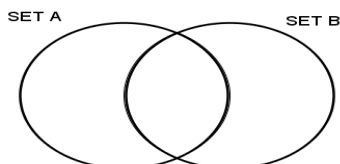6. In the diagram below, shade in the area that represents B^c.

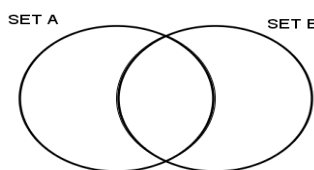7. In the diagram below, shade in the area that represents $(A \cup B)^c$.

8. In the diagram below, shade in the area that represents $(A \cap B)^c$.

SET A   SET B

9. In the diagram below, shade in the area that represents $(A \setminus B)$.

SET A   SET B

10. In the diagram below, shade in the area that represents $(B \setminus A)$.

SET A   SET B

Now check your answers using the interactive file, 'Venn Diagrams', on the Student's CD.

11. Does A\B differ from B\A? Explain your answer with the help of Venn Diagrams.

12. Does $(A \cap B)$ differ from $(B \cap A)$? Explain your answer with the help of Venn Diagrams.

13. Does (A U B) differ from (B U A)? Explain your answer with the help of Venn Diagrams.

14. Do A and A^c ever have any elements in common? Explain your answer with the help of Venn Diagrams.