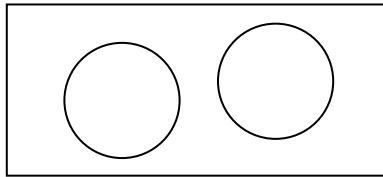


SET RELATIONSHIPS: D.I.C.E.S.

Dr. Stan Hartzler Archer City High School

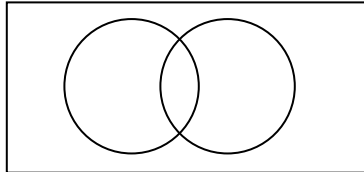
Disjoint

Probability:
"mutually
exclusive events"



$$A \cap B = \emptyset$$

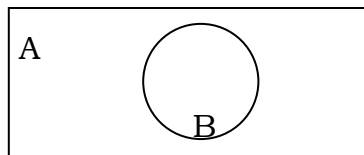
Intersecting



$$A \cap B \neq \emptyset$$

Complementary

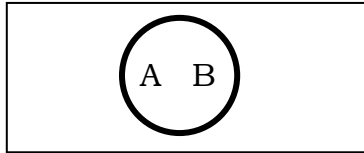
Probability:
"complementary
events"



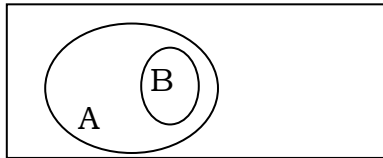
$$A \cup B = U$$

$$A \cap B = \emptyset$$

Equal



Subset



$$B \subseteq A$$

Core Concepts in Mathematics

Per music educators, music has a few core elements -- tone, pitch, timbre, and harmony, perhaps. By contrast, a global description of music might be "that which asks and answers questions with sound."

A global description of mathematics might begin with mathematics being the study of invariance, with number and form as basic elements. Core elements or concepts comprise a somewhat larger list, but the following list is stingy. Other ideas are embodiments of these concepts.

- | | |
|---|--------------------------------|
| 1. order | 6. classification/relationship |
| 2. number | 7. fraction/ratio |
| 3. set | 8. limit |
| 4. function | 9. operation |
| 5. properties of operations and relations | |