

Michigan League of Academic Games Senior On-Sets Variations 2011-12

No Forbidden: No Player may play a non-digit cube to Forbidden.

Required Cube: The Solution must contain a _____ cube. The player selecting this variation specifies when announcing the variation choice which non-digit symbol from the Resources is required.

Wild Cube: The _____ cube may vary and represent any symbol on the cubes except a digit. The wild cube must stand for the same symbol everywhere it occurs in the Solution. The player selecting this variation specifies when announcing the variation choice which cube from the Resources varies for the shake. The cube that varies may not be a digit.

U and \cap interchangeable: In a Solution, any \underline{U} cube may represent \underline{U} or $\underline{\cap}$, and any $\underline{\cap}$ may represent $\underline{\cap}$ or \underline{U} .

V and Δ interchangeable: In a Solution, any \underline{V} cube may represent \underline{V} or $\underline{\Delta}$, and any $\underline{\Delta}$ may represent $\underline{\Delta}$ or \underline{V} .

Two Operations: The Solution must contain at least two operation symbols. The operation symbols are \underline{U} , $\underline{\cap}$, $-$ and $'$

Multiple Operations: Every operation sign in Resources, Required, or Permitted may be used many times in a Solution.

No Null Restrictions: Each Restriction must remove at least one card from the Universe. In a chain restriction, this variation is satisfied if any part of the chain removes a card.

Double Color: In the Universe, each card containing the _____ set color will count double. The player selecting this variation specifies when announcing the variation choice which one of the four colored sets counts double.

Shift from Permitted: A player may, on his/her move, select a cube which has been played to Permitted and shift it from Permitted to either Required or Forbidden.

Symmetric Difference: The $-$ cube means symmetric difference, where $A - B$ is interpreted as $(A - B) \cup (B - A)$ with the last two $-$ signs are the usual set subtraction.

Blank Card Wild: Each Solution-writer must specify in writing which colors, if any are on the blank card. This variation may only be selected if the blank card is dealt.