

Choo Choo Ch' Boogie

$$1 = F$$

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[illegible]

A diagram of a 4x9 grid. The first column contains a blue note with a flat (b) and the number 5. The second column contains a blue note with the number 1. The third column contains a blue note with the number 6. The fourth column contains a blue note with the number 5. The fifth column contains a blue note with a flat (b) and the number 3. The sixth column contains a blue note with the number 1. The seventh column contains a blue note with the number 6. The eighth column contains a blue note with the number 5. The ninth column contains a blue note with a flat (b) and the number 3. The tenth column contains a blue note with the number 1. The eleventh column contains a blue note with the number 6. The twelfth column contains a blue note with the number 5. The thirteenth column contains a blue note with the number 6. The fourteenth column contains a blue note with the number 6. The fifteenth column contains a blue note with the number 1. The sixteenth column contains a blue note with the number 3. The seventeenth column contains a blue note with the number 1. The eighteenth column contains a blue note with the number 2. The nineteenth column contains a blue note with a flat (b) and the number 3. The twentieth column contains a blue note with the number 3. The twenty-first column contains a blue note with the number 4. The twenty-second column contains a blue note with a sharp (#) and the number 4. The label 4⁹ is at the bottom left.

The diagram illustrates the construction of a 2-approximation for a set cover problem. It shows five vertical lines representing elements. The first line is labeled 2^- at the bottom. The second line is labeled 5^7 at the bottom. The third line is labeled 1 at the bottom. The fourth and fifth lines are labeled $1 = F$ at the bottom. Horizontal bars of different colors (blue, green, red, orange) connect the lines, representing sets in the collection. The blue bars connect the first and second lines. The green bars connect the second and third lines. The red bars connect the third and fourth lines. The orange bars connect the fourth and fifth lines. The bars are labeled with numbers 1 through 7, indicating the sets they belong to.

Diagram illustrating a 3D coordinate system with axes labeled 1, 2, and 3. The axes are represented by lines, and the origin is marked with a small square. The 1-axis is vertical, the 2-axis is horizontal, and the 3-axis is diagonal. A grid of points is shown, with some points highlighted in blue. The points are labeled with numbers 1 through 7. The 1-axis has a label '1' at the bottom. The 2-axis has a label '2' at the origin. The 3-axis has a label '3' at the origin. A label '1⁷' is at the bottom right.

The diagram illustrates the decomposition of the tensor product of two irreducible representations of $SU(5)$. The vertical lines represent the representations, and the purple boxes represent the irreducible components of the tensor product.

- Line 1 (Leftmost):** Labeled with 4 at the top and 5^7 at the bottom.
- Line 2:** Labeled with 4 at the top, 2 and 7 in the middle, and 5 at the bottom.
- Line 3:** Labeled with 3 at the top, 2 and 7 in the middle, and 1 at the bottom.
- Line 4 (Rightmost):** Labeled with 1 at the top, 1 and 4 in the middle, and 1 at the bottom.

The decomposition is shown by the purple boxes between the lines:

- Between Line 1 and Line 2: 4 (top), 2 (middle), 7 (bottom), 5 (bottom).
- Between Line 2 and Line 3: 2 (top), 7 (middle), 5 (bottom).
- Between Line 3 and Line 4: 1 (top), 1 (middle), 4 (bottom).



