On-Sets: a vintage game of set theory

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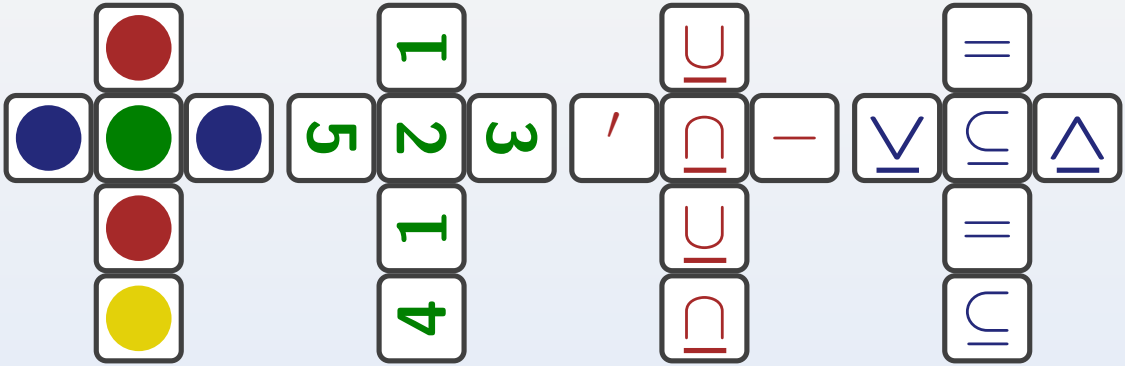
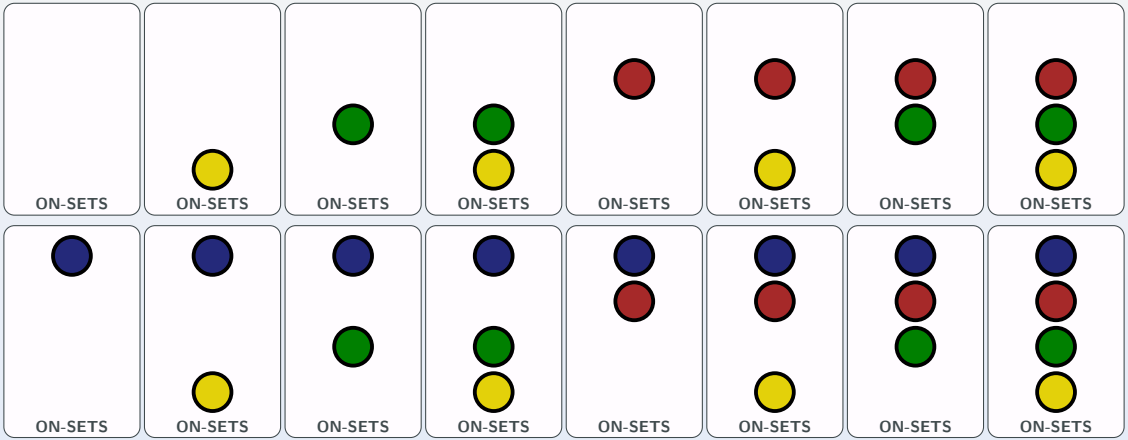
Dice



Cards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Set names

-  : all cards with a yellow dot.

Set names

-  : all cards with a yellow dot.
-  : a yellow dot, a green dot, or both.

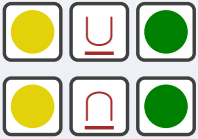
Set names

-  : all cards with a yellow dot.
-  : a yellow dot, a green dot, or both.
-  : both a yellow dot and a green dot.

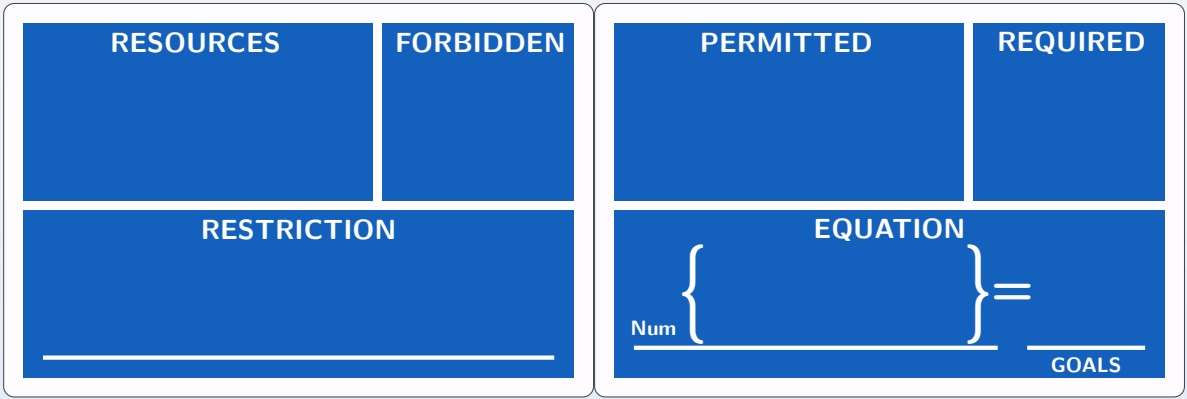
Set names

-  : all cards with a yellow dot.
-  : a yellow dot, a green dot, or both.
-  : both a yellow dot and a green dot.
-  : cards that do not have a yellow dot.

Set names

-  : all cards with a yellow dot.
-  : a yellow dot, a green dot, or both.
- : both a yellow dot and a green dot.
-  : cards that do not have a yellow dot.
-  : cards that have a yellow dot but do not have a green dot.

Game board


RESOURCES
FORBIDDEN
RESTRICTION
PERMITTED
REQUIRED
EQUATION
Num
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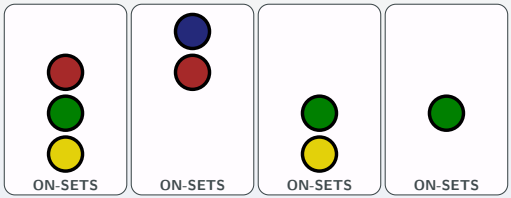
GOALS

Goal

means $2 + 3 = 5;$

means $2 \times 3 = 6;$

means $2 + (-2) = 0;$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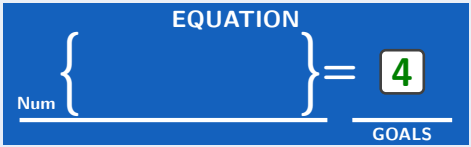
EQUATION
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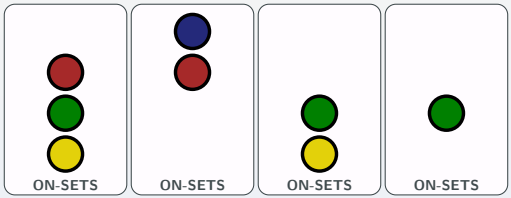
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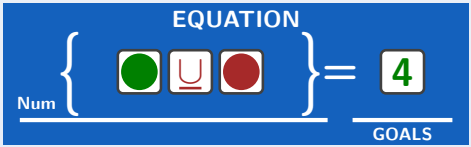
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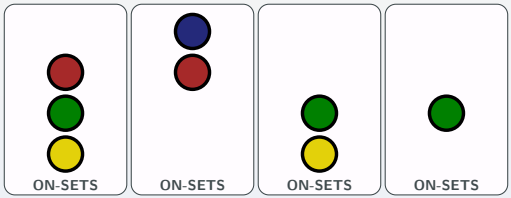
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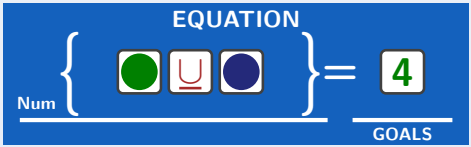
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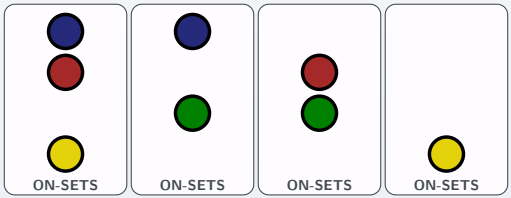
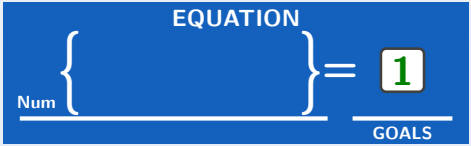
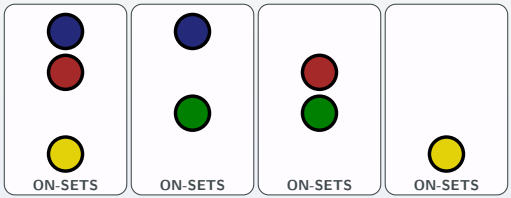


Pick out just the first card?





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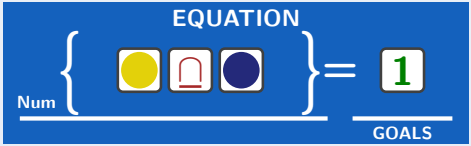


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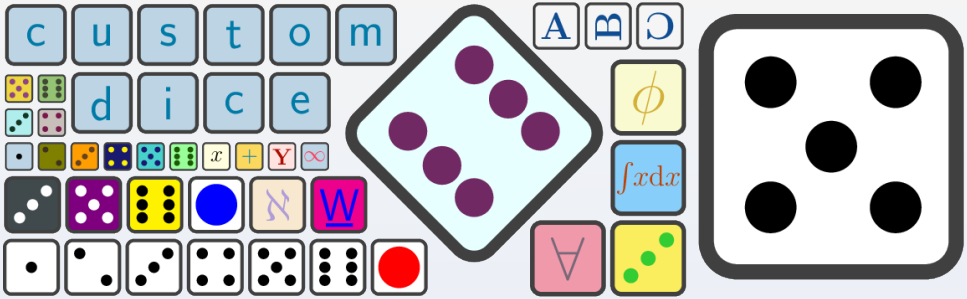

- I wrote a dice package for LaTeX: customdice
  - `\dice{2}`
  - `\textdice{G}` G
  - `\textdice{\(\aleph\)}`
  - `\dice[yellow,blue]{5}`
  - `\bigdotdice[white,blue]`
  - `\small\dice{4}`
  - `\Huge\dice{5}`
  - `IN L\dice{3}NE` IN L⁘NE