

# 1 Motivation

It all started with a pair of Sicherman dice. If you want to typeset a face of a six-sided die with 8 dots on it, the `epsdice` package will fail. So, I created a TiKZ-based alternative to `epsdice`, and extended it somewhat.

# 2 Commands

This package provides the following commands:

























```
\maybedice[⟨scale⟩]{⟨number of dots⟩}
\maybevardice[⟨scale⟩]{⟨number of dots⟩}
\maybemaskdice[⟨scale⟩]{⟨top row, middle row, bottom row⟩}
\maybeorigamidice{⟨face labels⟩}
\maybeorigamidiestd
\maybetinyorigamidice{⟨face labels⟩}
\maybetinyorigamidiestd
```

The styling of the output can be customized through

```
\maybedice setdotstyle{⟨style⟩}
\maybedice setnodestyle{⟨style⟩}
\maybedice setborderstyle{⟨style⟩}
```


or reset to default by `\maybedice resetstyles`.

# 3 Epsdice alternative

maybedice command	output of epsdice / maybedice / maybevardice
<code>\maybedice{1}</code>	 /  / 
<code>\maybedice{2}</code>	 /  / 
<code>\maybedice{3}</code>	 /  / 
<code>\maybedice{4}</code>	 /  / 
<code>\maybedice{5}</code>	 /  / 
<code>\maybedice{6}</code>	 /  / 
<code>\maybedice{7}</code>	/  / 
<code>\maybedice{8}</code>	/  / 
<code>\maybedice{9}</code>	/  / 

The size of output generated by `\maybedice`, `\maybevardice`, or `\maybemaskdice` may be changed by using changing the optional scaling parameter which defaults to 1.0.

The `\maybemaskdice` command takes in a comma-separated list of three “decimal masks” (not binary!) that determines where to draw dots on a 3-by-3 grid of the face.

For example, `\maybemaskdice[1.4]{100, 001, 001}` produces .

## 4 Origami

In addition to individual dice faces, the command

`\maybetinyorigamidice{⟨facelabels⟩}`

provides an in-text origami of a die, where **facelabels** is a comma-separated list of the labels on the faces of the die. The standard die would look like this: 

		6	
2	3	5	4
		1	

.

The

`\maybeorigamidice{⟨facelabels⟩}`

command provides a “full-sized” origami of a die:

		6	
2	3	5	4
		1	