

tikz-triminos

Single or several TriMinos,
made with TikZ...

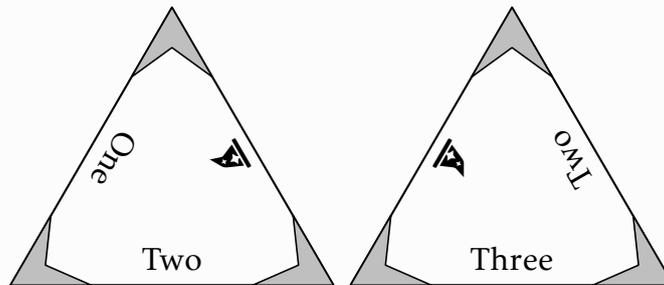
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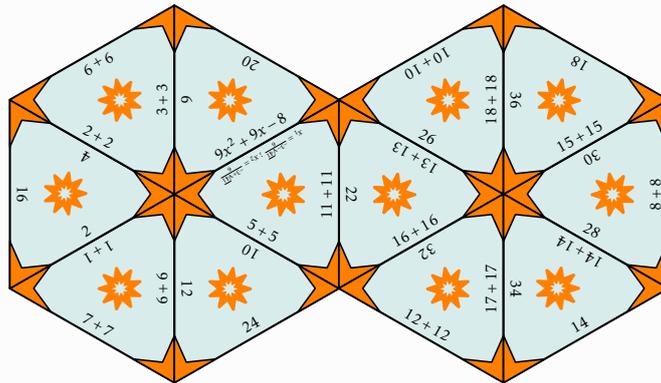
c pierquet – at – outlook . fr

<https://forge.apps.education.fr/pierquetcedric/packages-latex>

```
%single TriMino  
\tkztriminos{One $ Two $ \faHatWizard}~~\tkztriminos{\faHatWizard $ Three $ Two}
```



```
%multiple TriMino (9 or 12)  
\tkztriminos[keys]<tikz options>{list of values}
```



Inspirations, with CC BY-NC-SA 4.0 license, come from <https://schule.paul-matthies.de/Trimino.php>.

Yes, it's – again – a package "clearly too limited which simply aligns, linearly and without any real programming, the high-level macros of the packages tikz, listofitems, xstring, settobox and simplekv". But if you don't want to use it, it's easy... don't load it! If you want to take ownership of the package, with better programming, it's easy too... just ask!

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1 Loading, useful packages, purposes and acknowledgments

1.1 Loading and useful packages

In order to load tikz-triminos, simply use:

```
\usepackage{tikz-triminos}
```

1.2 Purposes and acknowledgments

The purposes of this small package is to provide simple tool to create TriMinos (1 or 9 or 12) with automatic positioning of texts.

Inspiration come from <https://schule.paul-matthies.de/Trimino.php> (CC BY-SA 4.0).

2 Usage

2.1 Main macro

In order to create (single or multiple) TriMinos, simple use:

```
\tkztriminos[keys]<tikz options>{list of values}
```

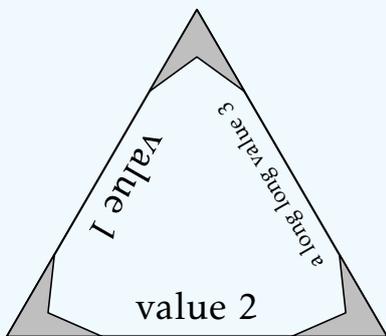
For list of values argument (seperated with \$):

- 3 values can be given (so 1 TriMino) ;
- 19 values can be given (so 9 TriMinos, with 5 *jokers*) ;
- 25 values can be given (so 12 TriMinos, with 10 *jokers*) ;
- 36 values can be given (so 12 full TriMinos).

Moreover:

- if the text is too long for the TriMino, the code adjusts its width ;
- icons of graphicx elements can be used ;
- with *jokers*, the final value is the *joker*.

```
%default output  
\tkztriminos{value 1 $ value 2 $ a long long value 3}
```



2.2 TikZ styles

Few TikZ styles are available, and they can be modified.

```
%sides of TriMino
\tikzset{tkztriminoside/.style={thick}}

%labels (with \tkztriminofont given by key)
\tikzset{tkztriminolabel/.style={font=\tkztriminofont,inner sep=1pt}}

%decoration (with \tkztriminocolor given by key)
\tikzset{tkztriminosidedeco/.style={semithick,draw=black,fill=\tkztriminocolor}}
```

2.3 Keys

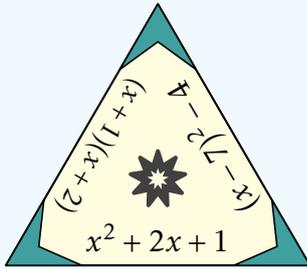
Available keys, to be given within [...] are:

- `size` := size of TriMino (default 5cm)
- `font` := font for texts (default `\Large`)
- `decoration` :=boolean for showing the *inner* decoration (default true)
- `decocolor` := color of the optional *inner* decoration (default lightgray)
- `showtxtlogo` := boolean for showing optional circular logo text (default false)
- `txtlogo` := text for optional circular logo (default TriMino~TriMino~TriMino~)
- `fontdeco` := font for optional circular logo (default `\tiny\sffamily`)
- `showiconlogo` := boolean for showing optional graphic logo (default false)
- `iconlogo` := graphic element for center logo
- `bgcolor` := optional background color of TriMino
- `scaledeco` :=scale for *inner* decoration (default 0.25)

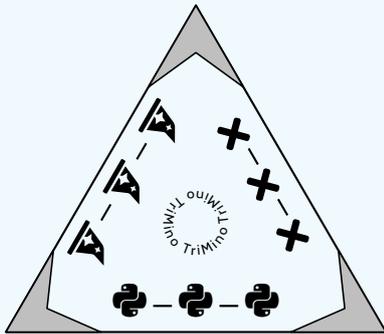
3 Examples

3.1 One TriMino

```
\tkztriminos%  
[showiconlogo,size=4cm,bgcolor=yellow!15,decocolor=teal!75,font=\large]  
{$(x+1)(x+2)$ $ $x^2+2x+1$ $ $(x-7)^2-4$}
```



```
\tkztriminos[showtxtlogo]{%  
\faHatWizard\,--\,\faHatWizard\,--\,\faHatWizard  
$  
\faPython\,--\,\faPython\,--\,\faPython  
$  
\faTimes\,--\,\faTimes\,--\,\faTimes  
}
```

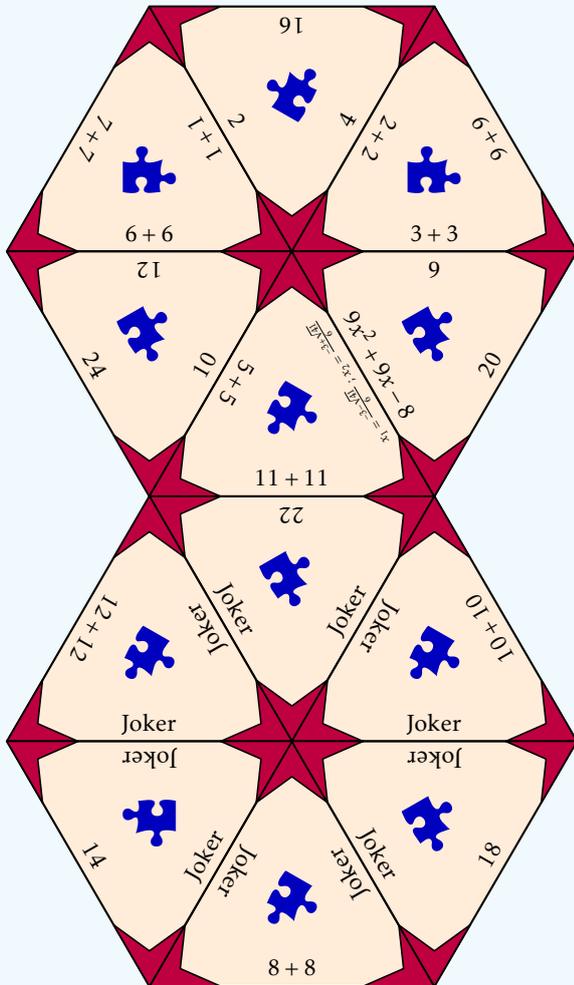


3.2 Several TriMinos

```

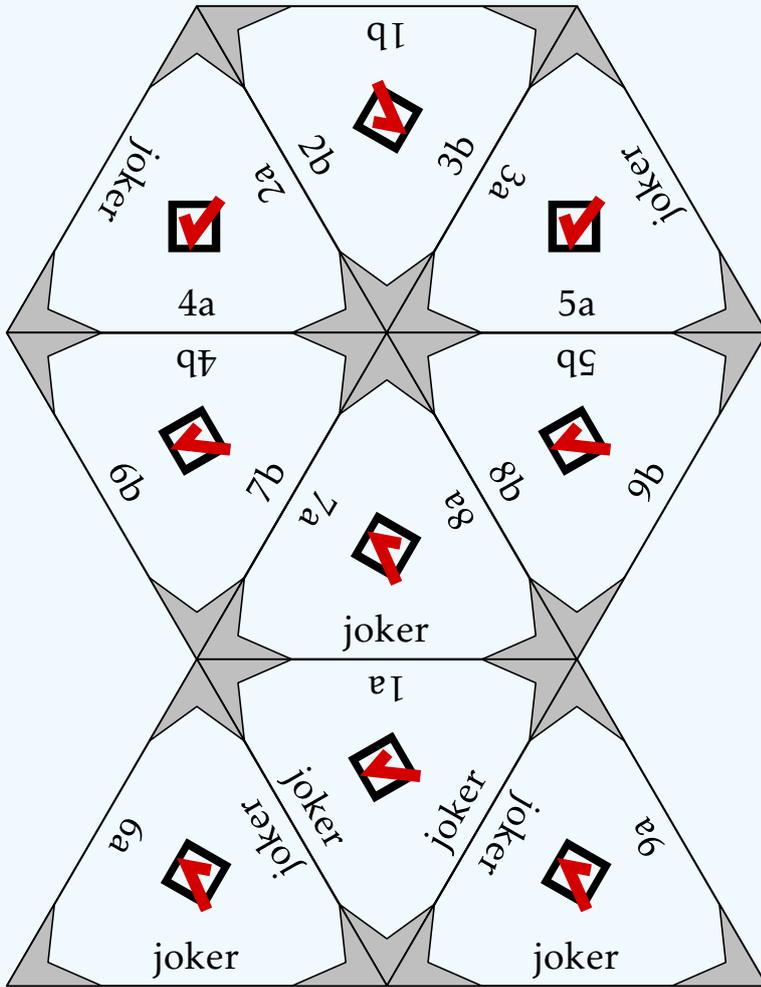
\tkztriminos%
[ size=5cm, showiconlogo, bgcolor=orange!15, font=\large, decocolor=purple,%
iconlogo={\scalebox{2.15}[2.15]{\textcolor{blue!75!black}{\faPuzzlePiece}}} ]%
<scale=0.75, transform shape>%
{%
$1+1$ $ $2$ $
$2+2$ $ $4$ $
$3+3$ $ $6$ $
 $\{x_1 = \frac{-3 - \sqrt{41}}{6}$  ;  $x_2 = \frac{-3 + \sqrt{41}}{6}$  $ $9x^2+9x-8$ $
$5+5$ $ $10$ $
$6+6$ $ $12$ $
$7+7$ $ $14$ $
$8+8$ $ $16$ $
$9+9$ $ $18$ $
$10+10$ $ $20$ $
$11+11$ $ $22$ $
$12+12$ $ $24$ $
Joker
}

```



```
\tkztriminos%
```

```
[showiconlogo, iconlogo={\includegraphics[height=0.75cm]{pf1-checked}}]%  
{1a$1b$2a$2b$3a$3b$4a$4b$5a$5b$6a$6b$7a$7b$8a$8b$9a$9b$joker}
```



4 History

0.1.0: Initial version