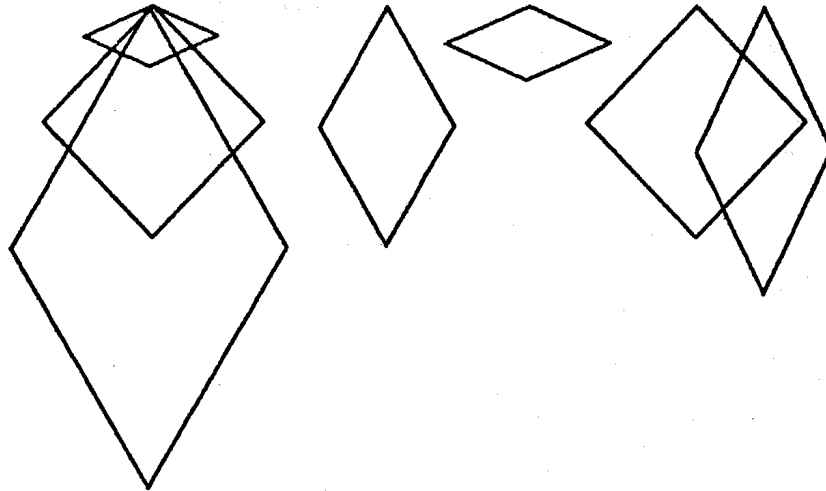And here are some sample diamonds...


```
\diamondline{30}{50}{100}\diamondline{70}{30}{50}\diamondline{30}{30}{80}
\hskip80pt\diamondline{30}{50}{50}\hskip50pt\diamondline{70}{30}{60}
\hskip60pt\diamondline{30}{30}{80}\qquad\diamondline{30}{60}{50}
```

To which can be added horizontal and vertical arrows if they are to be used for a flowchart.

<center>* * * * * * * *</center>

A (Possibly) Totally Useless Macro

Inspired by D. Knuth's prime number generator, I've put together a smaller, and humbler, number generator—this time for numbers in the Fibonacci series. Each new number in the Fibonacci series is made by combining the previous two numbers. It is known as a way of describing certain growth patterns, such as spirals in the cross-section of some seashells and as a measure of the 'golden section', a relationship thought to be especially harmonious by some artists and musicians. This macro will print out the Fibonacci series to as many instances as you call for in the argument (up to 47 that is, then the numbers get too large for TeX to manage).

Here is an example–\fibonacci{26}: 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, 987, 1597, 2584, 4181, 6765, 10946, 17711, 28657, 46368, 75025, and 121393.

```
\newcount\numbertimes \newcount\numone \newcount\numtwo
\newcount\savenumone \def\fibonacci#1{1, \numbertimes=2 \numone=0
\numtwo=1\loop \advance\numone by \numtwo \the\numone,
\savenumone=\the\numone \numone=\numtwo \numtwo=\savenumone
\advance\numbertimes by1\ifnum\numbertimes<#1\repeat
\ifnum\numbertimes=#1 \advance\numone by \numtwo\fi and \the\numone.}
```