Things I've Learned Working With Tikz

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1. Don't start with complicated approaches that I don't understand. Instead, begin with the absolute simplest implementation that shows the fundamental properties I'm interested in. Use simple fixed coordinates–don't try to make the exploratory approach general or adjustable. Save that for later after the fundamentals have been demonstrated.

2. After showing the fundamental drawing element or visual aspects I want, incrementally increase the complexity/generality, compiling every step of the way so I don't spend unproductive time with unfound bugs confounding the process.

3. When I google an issue for information, rapidly determine if it is a complicated solution. If so, reject it and look for something simpler. Don't spend time trying to figure it out because this can balloon into a massive time sink and misdirect subsequent efforts.

4. Begin with simple documentation to learn a new feature, rather than looking at a Stackexchange question/answer that involves more complicated and likely unneeded elements.

5. Review minimaltikz.pdf, which is especially good with

   - \draw
     - lines (single or multiple segments)
     - decorators to specify line thickness, color, arrows, help lines, dashed, dotted, etc.
     - line out and in angles
     - rectangle, circle, arc
     - plotting including axes
   - Filling area and setting borders
   - \node
     - standalone nodes and nodes defined in a \draw statement
     - Adding text labels
     - Locating labels relative to node coordinate

6. Develop my own documentation and examples to remind myself what I have previously learned so I don't have to go through it all again. Examples:

- `\draw`
- `\node`
- `\coordinate`
- `\newcommand` - see https://en.wikibooks.org/wiki/LaTeX/Macros for how to use
- `calcs` package
- `.styles`
- `positioning` package (still need to learn)
- Kinds of documents
    - Page with embedded figures:
      `\documentclass{article}`
    - Standalone figure:
      `\documentclass[border=10pt, convert={density=300}]{standalone}`