1. Before you start to use FITCH, think about what the premises and conclusion of the argument mean. Try to step through the reasoning informally, talking yourself through it, asking questions about what follows from what. ("Okay, so I know that all the cubes are small …")

   This will help you figure out whether the argument is valid (if the exercise didn't already tell you), and might also give you an idea of how to construct the proof.

2. Take each sentence in your proof and identify the type of sentence that you are dealing with, by picking out its "main connective": Is it a negation, a conjunction, a disjunction, a conditional, or a biconditional? Or does it begin with a quantifier that has scope over the entire sentence? In that case, that quantifier is its "main connective", so to speak, and we call it a quantifier statement.

3. Remember that in order to use a quantifier rule, the quantifier has to be the "main operator" of the sentence: the sentence has to begin with that quantifier, and its scope has to go all the way to the end of the sentence. So if you have a conclusion like

$$\forall x \; \mathsf{Cube}(x) \rightarrow \exists x \; \mathsf{Large}(x)$$

   you might be tempted to use $\forall$-Intro in order to prove it. But you can't: The statement isn't a universal quantifier statement, it's a conditional. You're going to have to use $\rightarrow$-intro instead.

4. Once you have identified the "main connective" of each sentence, try to use Elim rules to work **down** from that sentence if it's at the top of a proof, and try to use Intro rules to introduce a step at the **bottom** of the proof.

5. Use your hard quantifier rules ($\forall$-Intro and $\exists$-Elim) before you use your easy ones ($\exists$-Intro, and, especially, $\forall$-Elim). This is because your hard rules require you to introduce boxed up names that are new to the proof. Thus, if you start using $\forall$-Elim, replacing the variable with the name $\mathsf{a}$, you're going to have to choose a different new name for your subproofs that require you to flag a nickname. Then you will just have to turn around and to the $\forall$-Elim again with the new name. Not a big problem, but it takes extra steps and clutters things up.

6. Never start a subproof without knowing which rule you are planning to use it for. And …

7. …Once you decide to use one of the rules that requires a subproof, always fill in the "skeleton" of the subproof:

   - You know how many subproofs you are going to need.
   - You know what goes on the "assumption shelf" for each of these subproofs.
   - You know that you are going to need to add in some spaces after that assumption shelf to give yourself room to work.
   - You have a good idea of what you should put on the last line of the subproof.
   - You know what goes on the first step outside of the subproof.
   - And you know that you're going to have to cite that rule in the first step outside of the subproof.

   Filling in the "skeleton" of the proof makes a **huge difference**. It's just too easy to lose track of what you're doing in a proof because you think to yourself, "I'll just fill in that step later." Fill it in now, while you're thinking of it. This provides you with more to work with and will trigger new insights. And since partial credit is based on the percentage of a correct proof you have in your file, it's crazy not to fill in this information right away and lock down those points.