

Blake's Thoughts on Teaching Mathematics
April, 2005

1. Students like to see steps to a problem. Write the steps to do a problem on the board and then go through the problem and show the students each step.
2. Students get bored and don't pay full attention unless they are involved. Involve the students!
3. Students learn by example, not by theorem. If you want to put a theorem on the board, you should do several examples showing the theorem and then you can say that what they are seeing is not a coincidence but rather is always true. (Often this is enough and there is no need to write the theorem up.)
4. Students learn very little from a proof. If you think you need to do a proof, show why something is true with a specific example. Students probably won't remember anything about the reasoning involved from a "proof" but they might remember the reasoning involved if it is in an example.
5. If you want to put a definition on the board, it is best to put up several examples of the definition and then put up the definition. Young students have a difficult time understanding an example without motivation.