Pace of Signals and Systems Concept Test

The pace of Signals and Systems is:

- 1. Much too fast
- 2. Somewhat too fast
- 3. About right
- 4. Somewhat too slow
- 5. Much too slow

Pace of Signals and Systems Solution



The vast majority of students answered "about right." Good! Among the others, there is a *very* small leaning towards "too slow." I suspect that the next 9 lectures will have a little higher pace, so we're right about at the right pace, I think.

Light Bulb III Concept Test



Suppose you were asked to solve the circuit above (with component values provided). Which method would you choose, the loop method, or the node method, if you wanted to make the problem as easy to solve as possible.

- 1. The loop method
- 2. The node method
- 3. Either method would work equally well
- 4. Don't know

Node or Loop Method? Solution







The correct answer is Number 2. The circuit has 4 nodes. If the bottom one is chosen as ground, the upper left and upper right node voltages are known. Therefore, there will be only one unknown node (in the middle), so there will be one equation in one unknown.

Using the loop method, however, there would be three unknown loop currents. In this case, the node method is a clear winner.

In the first try at this problem, many students picked #1, perhaps assuming that because we were discussing the loop method, it would be the easier method. On the second try, most students got the right answer. Good!