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Advanced Photovoltaic Systems
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## Quiz #1-April 4, 2009

- 1. If your magnetic compass reads 180 degrees in Pleasant Hill, CA, then at solar noon, the sun would be
  - a. Where your compass reads 180 degrees
  - b. 15 degrees to the East of 180
  - c. 15 degrees to the West of 180
  - d. Where your compass reads 195 degrees
- 2. The California Solar Initiative
  - a. Increases your money for installing a PV system if you wait longer
  - b. Makes you pay less taxes in a residential situation
  - c. Is based on design of a system
  - d. Works like a Feed in Tariff (FIT)
- 3. The Federal incentive for PV for residential customers
  - a. Has worsened over the last year
  - b. Is based on a Production Tax Credit, just like it is for wind energy
  - c. Is capped at \$2000
  - d. Is not in the form of a grant
- 4. When you are designing a large flat rooftop PV system and are trying to decide to tilt the modules at 0 degrees, 10 degrees or 20 degrees, what considerations do you have to make?
  - a. More tilt requires less space, because you can fit the modules closer together if they are more vertical
  - b. You can fit more modules flat on a flat roof
  - c. The angle does not make a difference
  - d. 10 degrees will capture the most sun at latitude 38
- 5. 2:1 shading means
  - a. The shading object should be twice as far away as the height it is above the PV
  - b. The height of the shading object should be twice as tall as the distance of the tree, etc.
  - c. The shading object should be twice as far away as the height it is
  - d. The profile angle should be 22.5 degrees