Sloped roof mount assignment:

In groups of two:

Design a rail system for 3 strings of 150 volts of any PV module on a sloped roof. Include the following steps in your design.

1. Make a list of each step in the design process (not necessarily in this order).
   1. Pick a roof size
   2. Pick the roofing type (material).
   3. Pick a slope.
   4. Pick out a PV panel.
   5. Pick out the rail system.
2. Draw out the layout for an array of PV panels.
   1. Leave 18 inches of roof space or greater around the perimeter.
   2. Decide on landscape or portrait.
3. Make string voltage to a maximum of 150 volts.
   1. Reference a span table for spacing of the support brackets.
   2. Draw out the mounting brackets and rail layout.
4. Make a complete list of material.
   1. Include part numbers and quantity of each.
5. Make a complete list of tools.
   1. Indicate parameters of each tool.