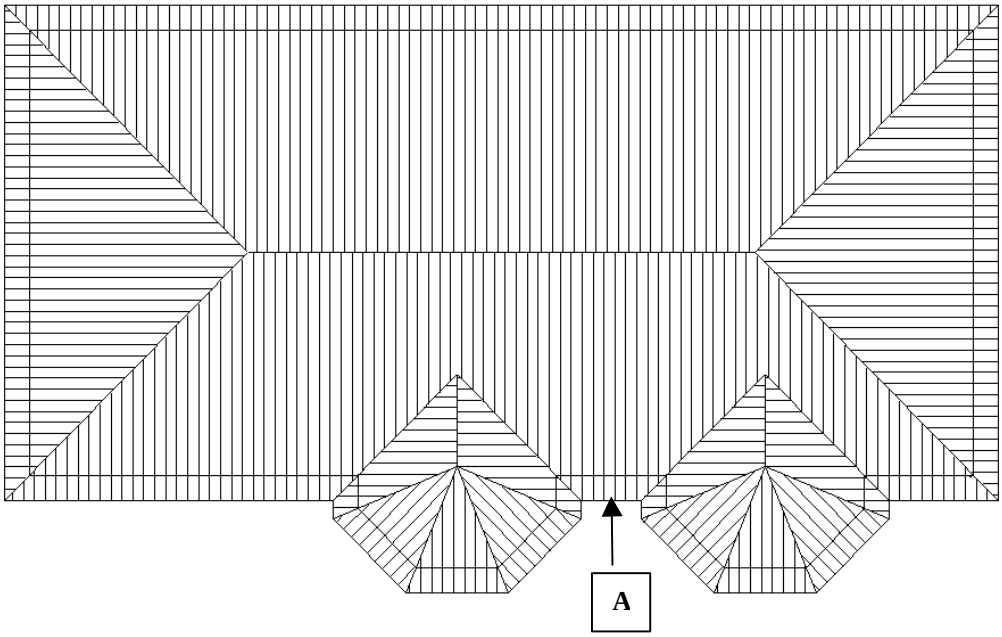
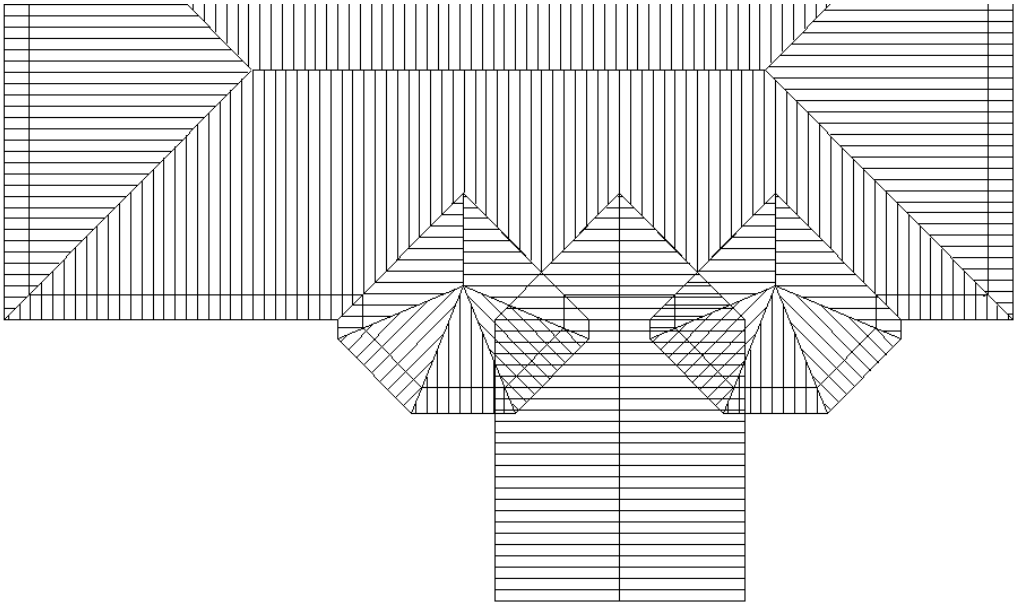
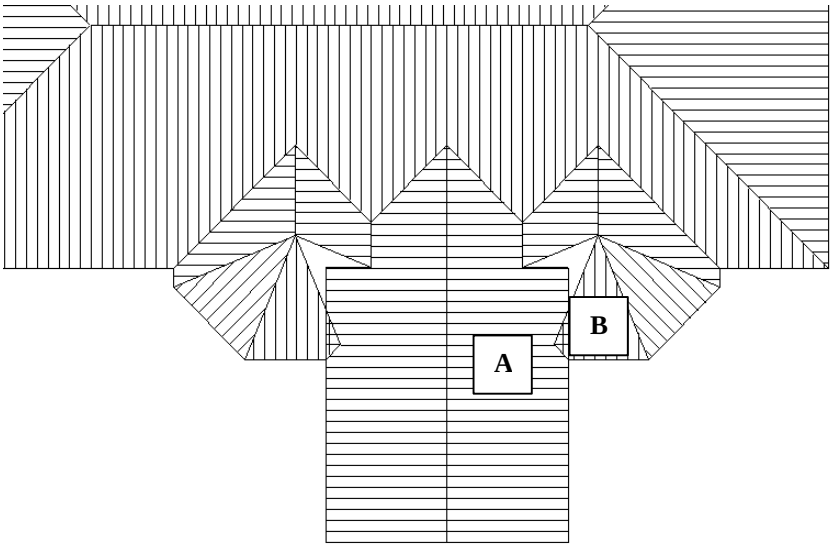
Number: 13
Objective: Insert a section of roof between two bay windows
Commands used: Intersect-Planes
Ins-Plane
Set-Display
Trim-Line



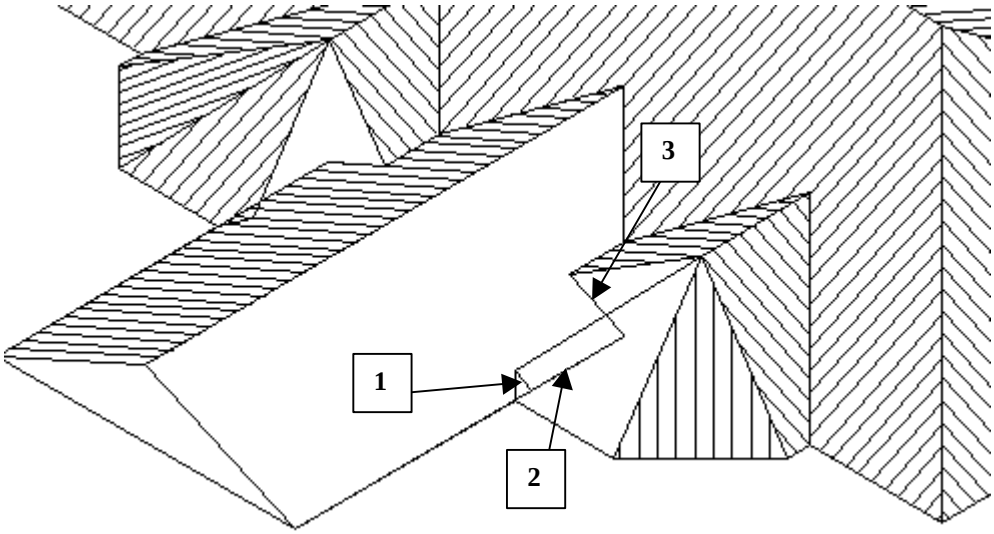
First, draw up the roof part in question without the projected carport, as shown above.
Then add in the carport using the dormer command and selecting eave line **A**. Your roof should look similar to the one below.



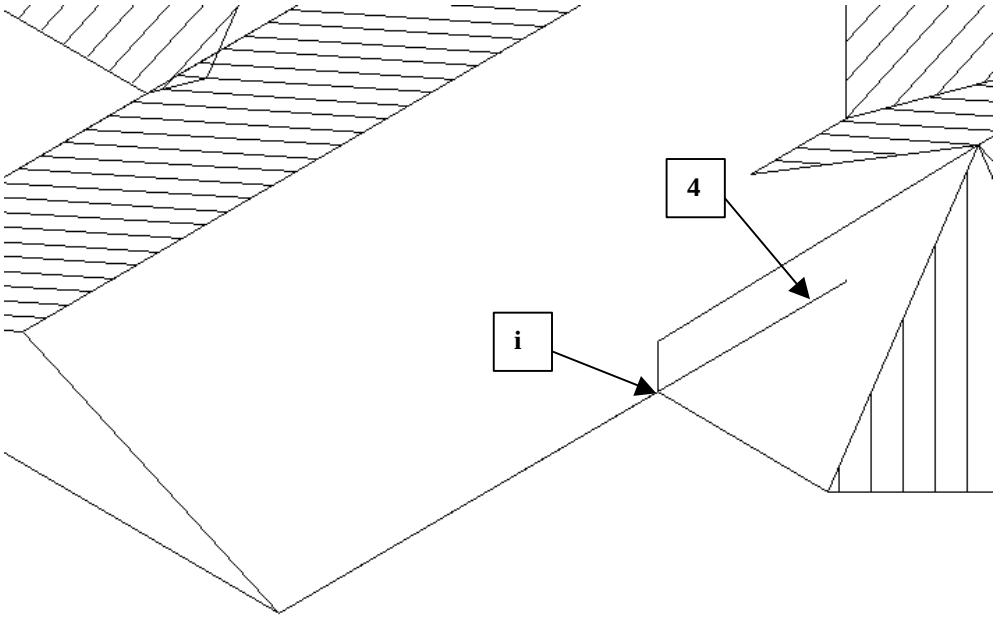
From here go to **Mod-Roof | Advanced | Intersect-Planes**. This will intersect the planes of the dormer with the planes of the the bay windows. The problem though is that this will not work %100, if it did it would make my life and yours a whole lot easier! As this process will delete your main roof plane you will need the insert the main plane using **Mod-Roof | Advanced | Ins-Plane** and select the lines that bound the main roof plane. Your roof should look similar to the following.



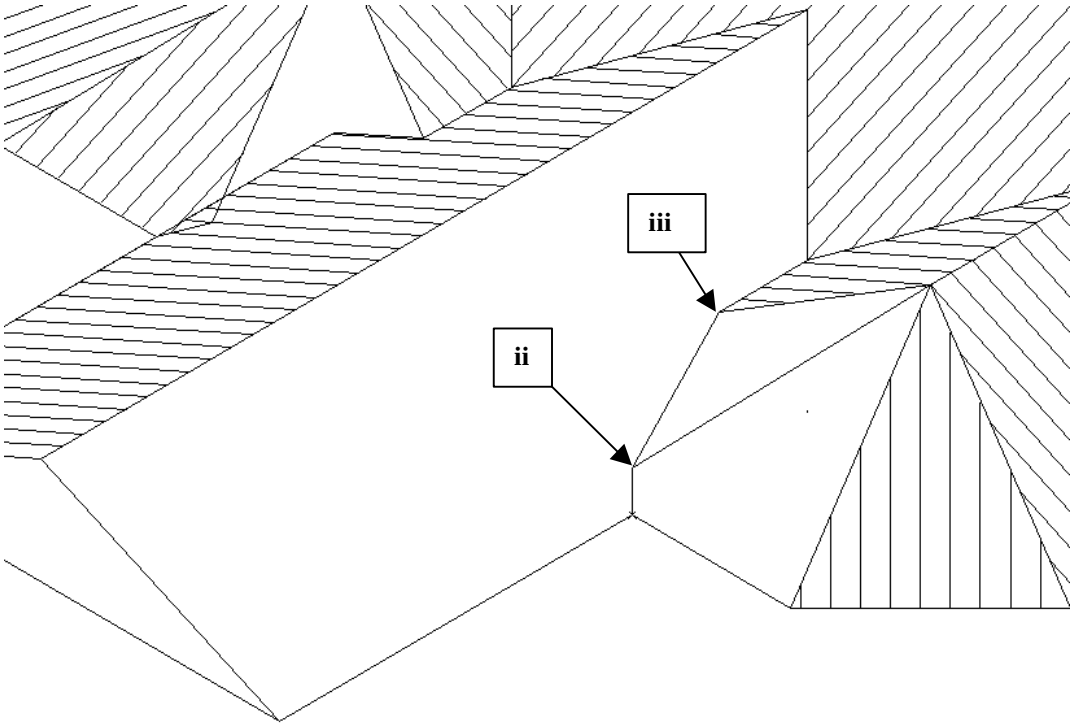
Just to make it a little easier we will turn **Off** the wall lines under **Utilities | Set-Display**. From here we need to delete planes **A** and **B**. We should then go into an **Iso** view as it is easier to see what is going on.

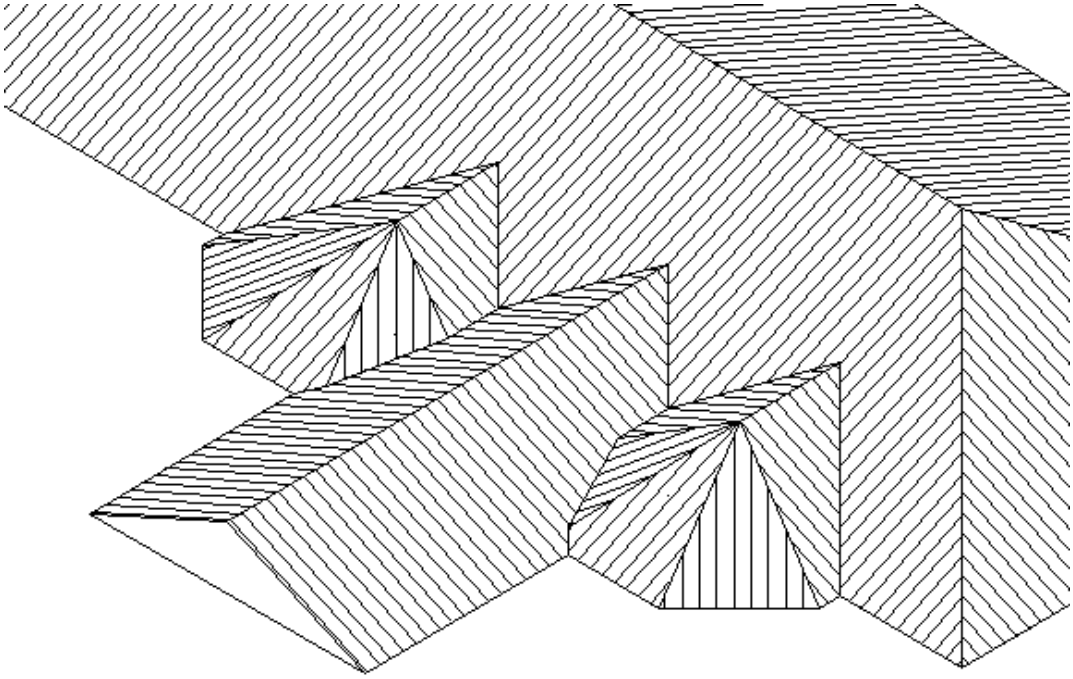


Now delete lines **1**, **2** and **3**.(When you select line **2** it will start flashing, select the shorter of the two lines.)



Now trim line **4** to point **i** using **Mod-Roof | Advanced | Trim-Line**. (Remember when we trim to a point we need to "**Snap**" to it.(**Shift + Left Click**))



The final modification we need to do is to insert a line from point **ii** to point **iii**. Go to **Mod-Roof | Advanced | Ins-Line | Free**, and "**Snap**" to points **ii** and **iii**. Your roof should look like the following.

Now we can insert our planes using **Mod-Roof | Advanced | Ins-Plane.**
This completes the right side of the roof. The process however is identical for the left hand side of the roof. Completed the roof should look similar to the following.