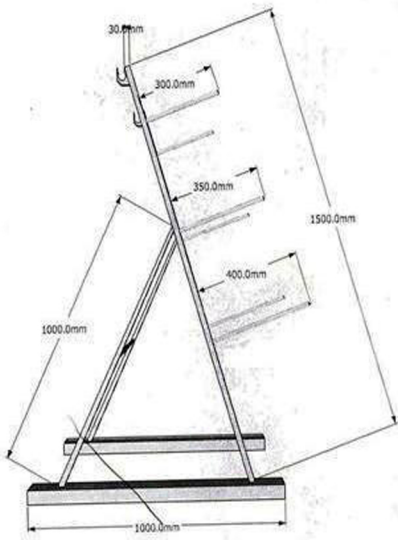
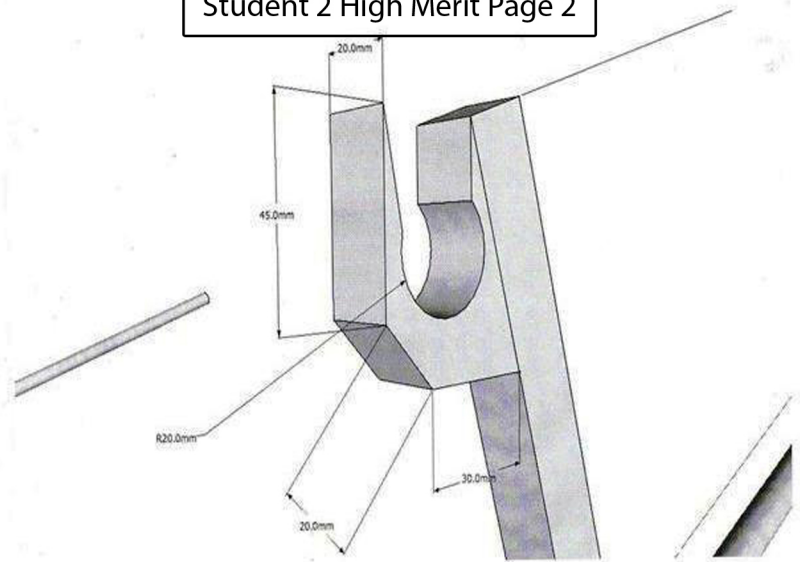


3



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5



The results of my research made me understand that a triangle shape would be good. It would give the strength I wanted. Research 1 picture gave me the best start to my own design. I modified it so it wasn't so big and space consuming.

I used the footing idea from Research 2 so that my rack will be stable. I also made sure my bars were angled so the weights won't fall off. I made the bars shorter after my stakeholder telling me this would make them stronger.

Research 3 gave me the idea to put hooks on the back for my bench press bar. It (as well as Research 1) made me realise I only wanted access from one side—so it could go up against a wall and take up less space. This kept dad happy.

I included the compactness of Research 4. I designed mine so you didn't have to bend like in Research 4. Also so that it can be flexible in what weights can be stored.

4

I wanted to make sure the rack would fit in the area it was intended for. I took it home and placed it in the corner of the shed.

I found that it fits there well and doesn't stick out so no one will get hurt, it sits stable on the floor, I can reach the top rack ok, I can easily get the weights off. And dad said its OK sitting there in his shed.

6

I got some polystyrene and used a hot wire to get bits that were the same thickness as my weights. I then cut out circles the same diameter as my weights. I placed these on my model to make sure the bars were spaced out right so that all my weights would fit. They did.

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