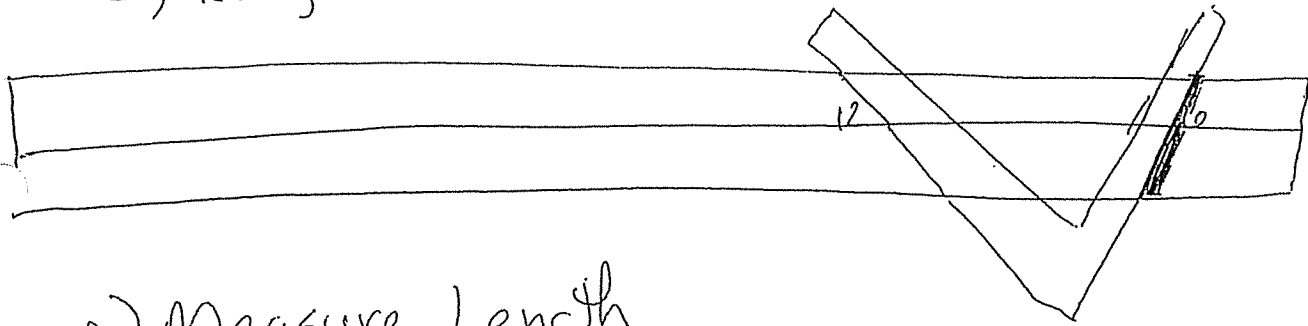




C) Klage

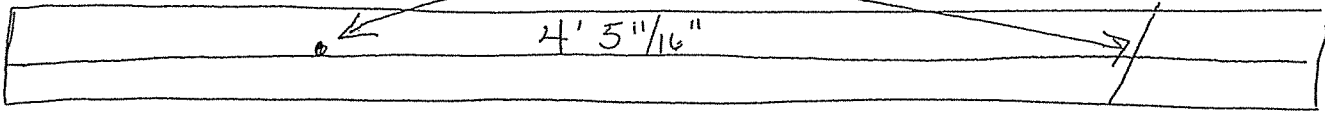


D) Measure Length

1/4 pitch, 8' span

53 11/16"

4' 5 11/16"



$$\frac{1}{4} = 6:12$$

book	@	1 <sup>st</sup>	number	under	6,	should	always	be	13.42
"	"	"	"	"	8,	should	always	be	14.42
"	"	"	"	"	12,	should	always	be	16.97
"	"	"	"	"	4,	should	always	be	12.65
"	"	"	"	"	3,	should	always	be	12.37

Take this number and multiply it by the run (1/2 the span)

$$\begin{array}{r} 13.42 \text{ (1<sup>st</sup> number)} \\ \times 4 \text{ (run)} \\ \hline 53.68 \end{array}$$

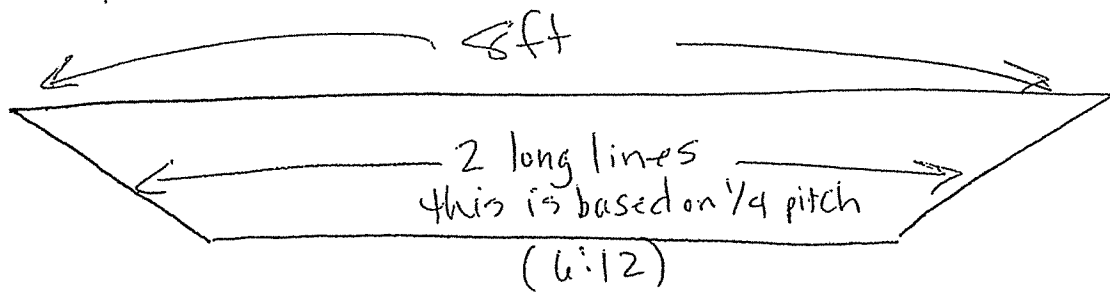
.68 is not on the tape measure, how do you get that?

$$\begin{array}{r} .68 \\ \times 16 \\ \hline 408 \\ 68 \\ \hline 10.88 \end{array}$$

If number is greater than .5 round up  
If number is less than .5 round down

10.88 > 10.5  
round up to 11 so it is 53 11/16"

Next is the span board. If you have an 8' span  
 long side will be 8 feet long and you will  
 saw your pitch by marking on (12) side.



These are the 2 longest cuts students will make,  
 and the most challenging. Lot of practice and  
 patience on this part.

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The next step is the middle board. Here are 2  
 examples

A)  $\frac{1}{4}$  pitch, 8' span

we have a 6:12 pitch  
 you will take the 6 and multiply times the run, which is four.

$$\begin{array}{r} 6 \\ \times 4 \\ \hline 24 \end{array}$$

you will then subtract the  $24 - 3\frac{1}{2}$ ", which is for the  
 $2 \times 4$

$$\begin{array}{r} 24 \\ - 3.5 \\ \hline 20.5 \end{array}$$

so  $20\frac{1}{2}$ " is how long the middle board needs  
 to be

B)  $\frac{1}{3}$  pitch, 10' span

So we have a 8:12 pitch

you will take the 8 and multiply times the run, which is five

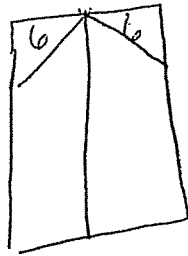
$$\begin{array}{r} 8 \\ \times 5 \\ \hline 40 \end{array}$$

you will then subtract the  $40 - 3\frac{1}{2}$ , which is for the  
 $2" \times 4"$

$$\begin{array}{r} 40 \\ - 3\frac{1}{2} \\ \hline 36\frac{1}{2} \end{array} \rightarrow \text{so } 36\frac{1}{2}" \text{ is how long the middle board needs to be}$$

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Next step is to cut middle board so it fits into top



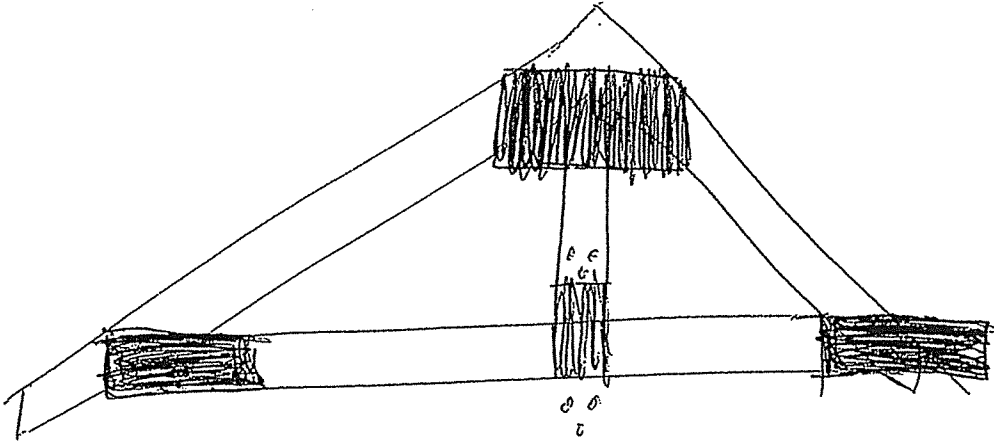
use the (6) side to find this

if you had an 8:12 pitch, use (8) side to find this

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Next step is to nail project together, making sure  
you use 8d nails,

Last step is to put gussets using 6d nails



Nail in 3!

o o  
o

o  
o o

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Good luck; have fun! ▼

# PARTS of A RAFTER

