Name $\qquad$

1. Convert all dimensions on the blueprint attached from metric to US Customary, to the nearest $16^{\text {th }}$ of an inch. After converting, measure the motor stand with a combination square to verify your conversions.
2. Determine the total length of angle iron needed to make one of the motor stands (in inches). In order to do so, you may need to calculate missing dimensions. Ignore kerf at this point.
3. You need to make a dozen. Determine to total length you need altogether.
4. You will order $10 \%$ more than what is needed (multiply by 1.1 ). What is this amount?
5. How many 20 foot lengths do you need to order?
6. Determine the weight of one motor stand. Use the Ryerson stock list. Verify your weight determined by placing the motor stand on the scale and write it down here and compare (you need to place it on the scale upside down).

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