

Welding: Hibachi Grill Construction

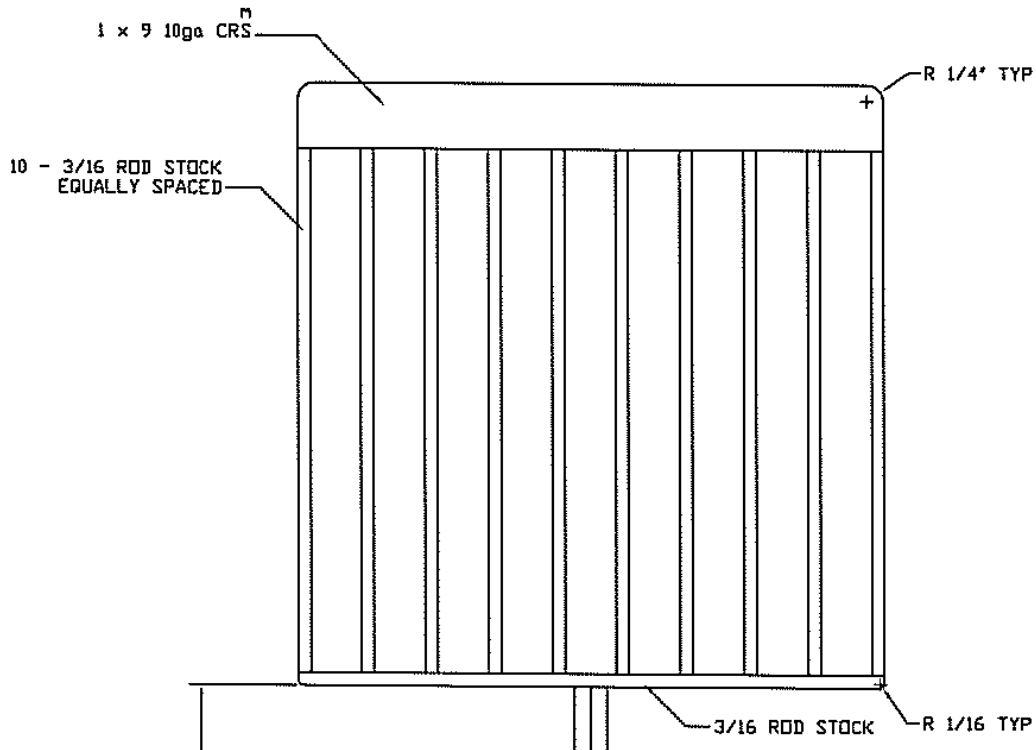
Fractions and Operations

1. Perform the following operations using appropriate order of operations:

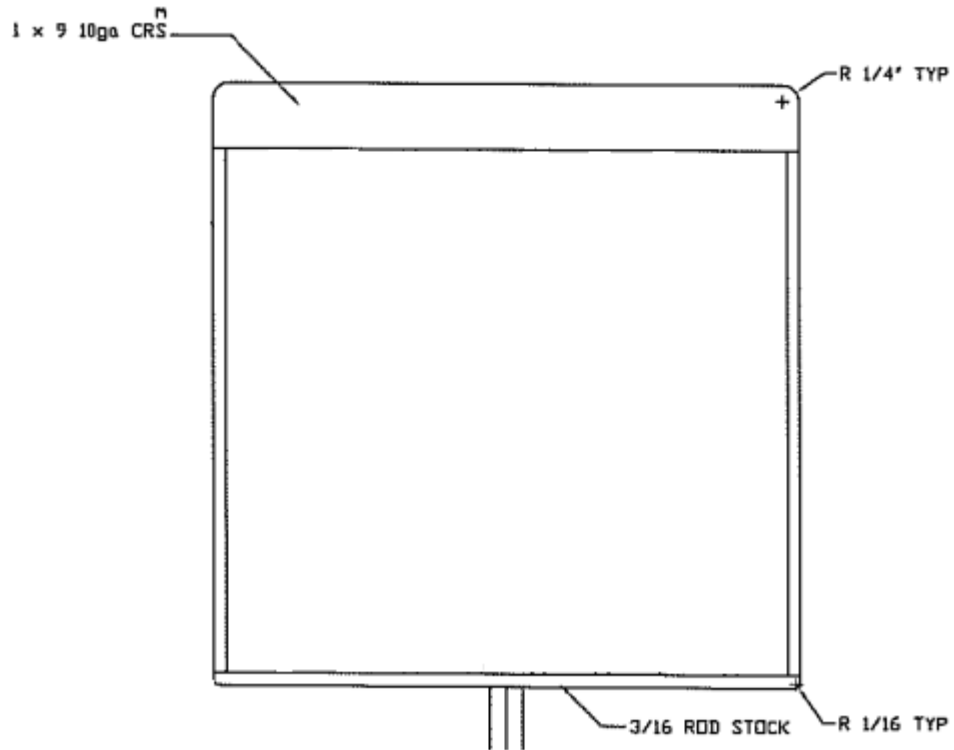
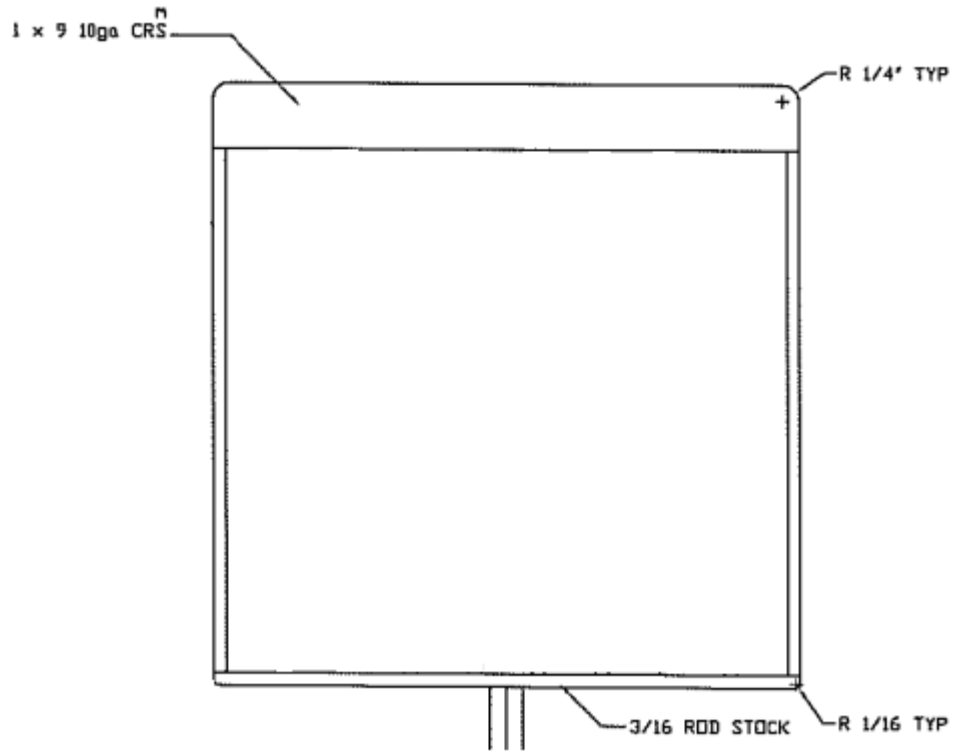
$\frac{5}{16} + \frac{3}{4}$	$3 + 5\left(\frac{3}{8}\right) - \frac{1}{2}$
$2\frac{3}{8} - 1\frac{1}{2}$	$4\left(\frac{1}{8}\right) + \frac{1}{4}\left(3\frac{1}{2}\right) - \frac{3}{4}$

2. The standard Hibachi grill will be built using the dimensions given the diagram below. Determine the total length of $\frac{3}{16}$ rod used to construct this grill.

Note: All measurements shown are in inches (in).



3. Create your two different designs for grill. Sketch the two designs on the following diagrams:



4. Determine the total length of $\frac{3}{16}$ rod used to construct each of the two variations of your grill.

Show your work!

Design one is _____ inches total

Design two is _____ inches total

5. Pick the design you chose to build and convert fractional total into decimal total and using the cost per foot of the $\frac{3}{16}$ steel rod given to you by your instructor, calculate the total cost of materials used to manufacture your grill. (Remember to add in the original 54" and 38" we used to construct the handle.)

Total length _____ x _____ cost per foot = _____ material cost to manufacture a grill