Math Trades 1

Activity #1 - Whole Numbers

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

You are asked to produce the following items during your shift by cutting parts of carbon steel with a saw from stock for a project. You need to minimize your waste and use a minimum number of bars. The bars are 20 feet. You need to show which lengths you will get out of each bar and denote it on the bars below. Also show the lengths of your drop (leftover pieces). Note, there are probably more bars then you actually need.

For each cut, assume 1” kerf (width of the cut). (Hint: 1 ft = 12 in)

**¼ ” round stock**

3 at 90”, 2 at 115”, 4 at 20”, 7 at 38”

How many bars did you need? \_\_\_\_\_\_\_\_

What is your total amount of drop? \_\_\_\_\_\_\_

**½” flat bar**

4 at 135”, 6 at 95”, 5 at 24”, 4 at 55”, 3 at 70”

How many bars did you need? \_\_\_\_\_\_\_\_

What is your total amount of drop? \_\_\_\_\_\_\_

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For answer keys and additional resources from this activity like cut out pieces to make this activity hands-on, go to [www.nwtc.edu/mathnsf](http://www.nwtc.edu/mathnsf) and submit the form for more information.