SPRAYER CALIBRATION WORKSHEET
Sprayer ID: _____ DATE: _____

A) DISTANCE THE SPRAYER MOVES IN ONE MINUTE

_____ SECONDS TO COVER 88 FEET - 1ST TIME [RUNNING START]

_____ SECONDS TO COVER 88FEET – 2ND TIME [RUNNING START]

_____ AVERAGE TIME in seconds [USE BELOW]

_____**60**_____ = _____ **MPH** * **88ft** = **A)**_____**ft traveled in one minute**
Average Time

B) EFFECTIVE BOOM WIDTH (IN FEET)

_____ NUMBER OF NOZZLES

_____SPACING BETWEEN NOZZLES [in inches]

_____# NOZZLES * _____SPACING = _____INCHES

_____INCHES / 12 = **B)**_____ **BOOM WIDTH** _IN FEET_

C) AREA COVERED IN ONE MINUTE

B | <- A ->
| C |

A)_____ ft traveled in 1 min times B)_____ft of boom width = C

C = _____ft^2 = **area covered by spray rig in 1 minute**

D) TIME TO SPRAY ONE ACRE

Divide C into 43,560 ft² [remember 43,560 ft^2 = 1 acre]
to find how many minutes it takes your rig to cover 1 acre

 43,560 ft^2/acre = **D)** _____ **minutes to spray 1 acre**

C = _____

F) **AMOUNT OF SPRAY PER MINUTE**   Spray rig's Gallons Per Minute [GPA]

Collection from nozzles: Length of time : _____sec [*use to convert to one minute*]

Amount collected per nozzle: in ounces

1st trial

2nd^t trial

Average collected per nozzle = _____   * # nozzles = E)_____ total ounces

BE SURE TO FIND TOTAL OUNCES **PER MINUTE** and divide by 128 oz/gal

E=_____**oz/minute** = **F)** _____ **GPM** [gallons per minute **for the BOOM**]
    128 oz/gal

GALLONS PER ACRE CALCULATION

 Take the spray rig's GPM times the minutes to cover 1 acre
 = the GPA [Gallons Per Acre] of your spray rig

 F)_____GPM * D)_____ Minutes/acre =

 _____ the GPA [Gallons Per Acre] of your spray rig

 A quick formula check for the above method is

GPA =   5940 * GPM for one nozzle
MPH * nozzle spacing in inches