

## **PLOTTING COORDINATES – WING DESIGN**

### **EXCELLENT (4-5)**

- 1) Sets appropriate scale
- 2) Plots all points correctly
- 3) Makes smooth curve to complete points
- 4) Does all work neatly and accurately

### **FAIR (2-3)**

- 1) Sets a scale
- 2) plots most points correctly
- 3) Makes reasonable curves to connect points
- 4) Work is reasonably neat and accurate

### **POOR (0-1)**

- 1) Sets inappropriate scale
- 2) Does not plot points correctly
- 3) Connected points do not generate appropriate curve
- 4) Work is not neat and accurate

## **FINDING THE SURFACE AREA OF THE WING – AVERAGING METHOD**

### **EXCELLENT (4-5)**

- 1) Accurately places sheet of graph paper over airfoil
- 2) Accurately finds the surface area of the foil by averaging interior and exterior squares
- 3) Work is neatly done, ideas are clearly shown

### **FAIR (2-3)**

- 1) Places graph paper over airfoil
- 2) Finds the surface area only by estimating squares inside the airfoil
- 3) Work is neat and well organized

### **POOR (0-1)**

- 1) Places sheet of graph paper randomly over airfoil
- 2) Only counts full squares to estimate the interior area of the airfoil
- 3) Work is unorganized, ideas not clearly thought out