$\qquad$ Date: $\qquad$ Class: $\qquad$

## Data Collection Sheet

Collect Your Data

| Polygon <br> (\# sides) | Sum of <br> Interior Angles | Measure of <br> Angle 1 | Measure <br> Angle 2 | Deflection of <br> Angle 1* | Deflection of <br> Angle 2* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Triangle (3) |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

*Tip for finding the deflection angle: You have the initial measurements of the target angles. Once you apply load to your truss, the target angles change. Calculate the change between the initial target angle and the deformed angle. The change is called the deflection angle.
Load capacity:
\# of books the truss supported

First iteration $=$
Second iteration $=$

## Graph Your Data

1. Graph the deflection in each angle vs. the number of sides in each polygon.


Name: $\qquad$ Date $\qquad$ Class: $\qquad$
2. Graph the number of books your truss supported vs. the number of sides in each polygon.


