**ECON528, Microeconomics for Business**Fall 2020

**High-Engagement Individual Assignment 2 (Module 1) (60 points)**

*You must submit your work in the form of* ***either*** *a Microsoft Word document* ***or*** *a PDF file,* ***one file only****.* ***No other formats will be accepted.***

You may use a tablet computer and the native drawing tools provided. You may either use a digital scanner to scan the graph, or you may take a digital photo of the graph. With either method, you will need to save the image file to your computer. If you use your phone camera you can email the image to yourself and then download the image attachment. Once you have the image file on your computer you can insert it into a Word document by doing the following:

1. Click the INSERT tab on the menu ribbon at the top of the Word screen:
2. Click the Pictures button on the INSERT tab:
3. This will open the Insert Picture dialog box where you will need to locate the image file on your computer, select it, and click Insert. This will insert the image into your Word document.
4. You may need to resize the image. To do so, click the resize handle (pointed out below) and drag the handle up and to the left to make the image smaller or down and to the right to make it larger:
5. Your submissions will generally include text in addition to your graph image(s), you can type your text responses right in the same document as your graph(s). If needed you can insert more than one image in the same document if the assignment calls for that.
6. Once your answer is complete, save your work as a Word document to be submitted in Compass. Or, if you prefer, you may save your file as a pdf document by clicking the File tab on the menu ribbon and choosing Save As, choosing a filename and location as usual, and changing “Save as type” to PDF.

*Please utilize well-executed, clearly constructed one graph for showing responses to all questions. You do not have to reproduce the graph for* ***each*** *question. Please remember to:*

* *Label all axes (P, Q)*
* *Label all lines/curves (Demand, Supply)*
* *Label all relevant equilibrium points*
* *Label intercepts for your linear demand and supply. (Intercepts are the points where the lines intersect the axes. For example, if a demand curve intersects the price axis at P=100, indicating that at P=100, 0 units are demanded, you should label that point on the axis with the price of 100).*
* *Please limit your depictions of supply and demand only to the non-negative values of P and Q*
* *(e.g., utilize only* [*Quadrant 1 of the coordinate plane*](https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-negative-number-topic/cc-6th-coordinate-plane/a/coordinate-plane-parts-review) *https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-negative-number-topic/cc-6th-coordinate-plane/a/coordinate-plane-parts-review)*

**Question 1 (15 points)**

Suppose you have been hired by a research firm trying to understand the market for Widgets (a hypothetical product). Your analysis of the data indicates that the Demand curve for Widgets is estimated to be linear and given by equation *Qd = 100 – P* and the Supply curve for Widgets appears to be linear as well and is estimated as *Qs = 3P – 20*. Graphically draw these two curves, labeling all relevant points (such as intercepts for each line) on the horizontal and vertical axes.

**Question 2 (15 points)**

Given that Demand is *Qd = 100 –P* and Supply is *Qs = 3P – 20*, your next assignment is to compute the equilibrium Price and Quantity in the market for Widgets. Indicate these values on the graph.

**Question 3 (15 points)**

The firm that hired you has estimated that improvements in Widget quality tastes will cause the Demand curve to change to *Qd = 140 –P*. If the Supply curve remains the same (*Qs = 3P – 20*), graphically draw these two curves, labeling all relevant points on the horizontal and vertical axes.

**Question 4 (15 points)**

Given that New Demand is *Qd = 140 – P* and Supply is *Qs = 3P – 20*, your next assignment is to compute the new equilibrium Price and Quantity in the market for Widgets. Indicate these values on the graph.