UNIVERSITY OF ALBERTA
ALBERTA SCHOOL OF BUSINESS

# BUEC 311: Business Economics, Organization and Management

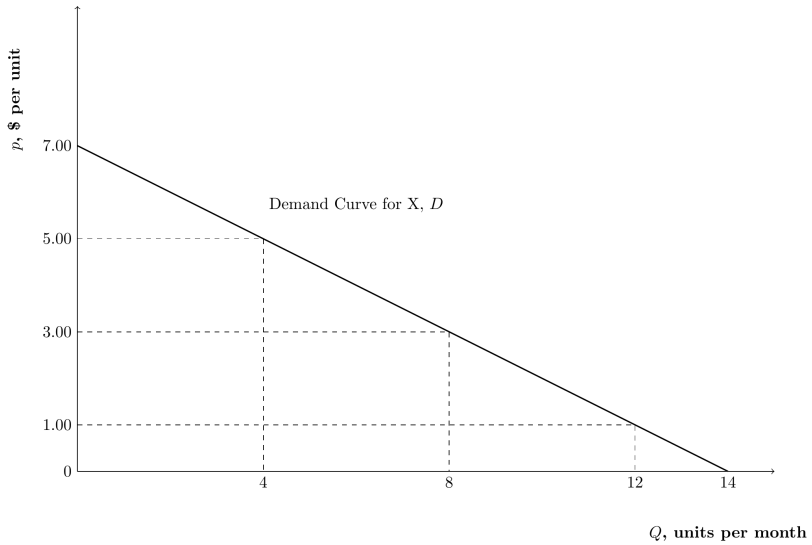
## Problem Set #2

## Mechanics of Supply and Demand

## September 7, 2020

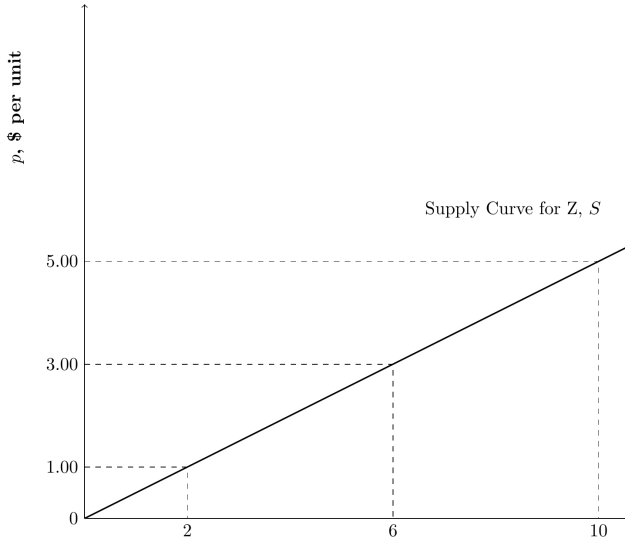
This week's problems are meant to give you some practice on the basic tricks you'll need to manipulate supply and demand curves and calculate equilibrium conditions. In this questions, I've given you multiple steps intentionally to build habits like checks and double-checks that you'll want to use. I won't always give these to you on exam questions, but best to build the habit now.

1. Suppose that my personal demand curve for coffee is given by $Q = 4 - \frac{2p}{3}$.
   a) Draw the inverse demand curve for this function (i.e P as a function of Q).
   b) How many cups of coffee would you expect me to consume per day at a price of $2 per cup?
   c) Find an example (if you can) of what economists would call a perverse incentive, or a rule that likely leads to behaviours that the professor might prefer to avoid.
   d) Consider some of the decisions you've made this Fall to prepare for classes. Which decisions would have changed, and how, if you'd had access to an extra $500? How would you have had to change your decisions if you received an unexpected bill for $500?
2. Think of an example in your life in which you behave as though you were following a demand curve (i.e. when prices of good X drop, you buy more).




3. Now, consider the opposite. Think of an example in your life in which your consumption of a product or service doesn't appear to be related to its price or to your income.

4. Now, let's switch to the supply side. Can you think of a market or firm where you readily see a supply curve functioning like it does in an economics textbook?




5. We often see discussion of supply and demand approached slightly differently in commodity and labour markets than how we approach the terms in microeconomics. For example, below is a graph of Energy Information Administration global oil demand, showing both historical demand and forecasts.

   a) When commodities analysts talk about demand increasing or decreasing over time, what do they mean?
   b) What's different about this graphic compared to the demand graphs that we use in class?
   c) [this is a tough question for week 1] Does an increase in demand as shown in the graph below, for example from 2018 through 2019, necessarily mean that there was an increase in demand (i.e. a shift to the right in the demand curve)?