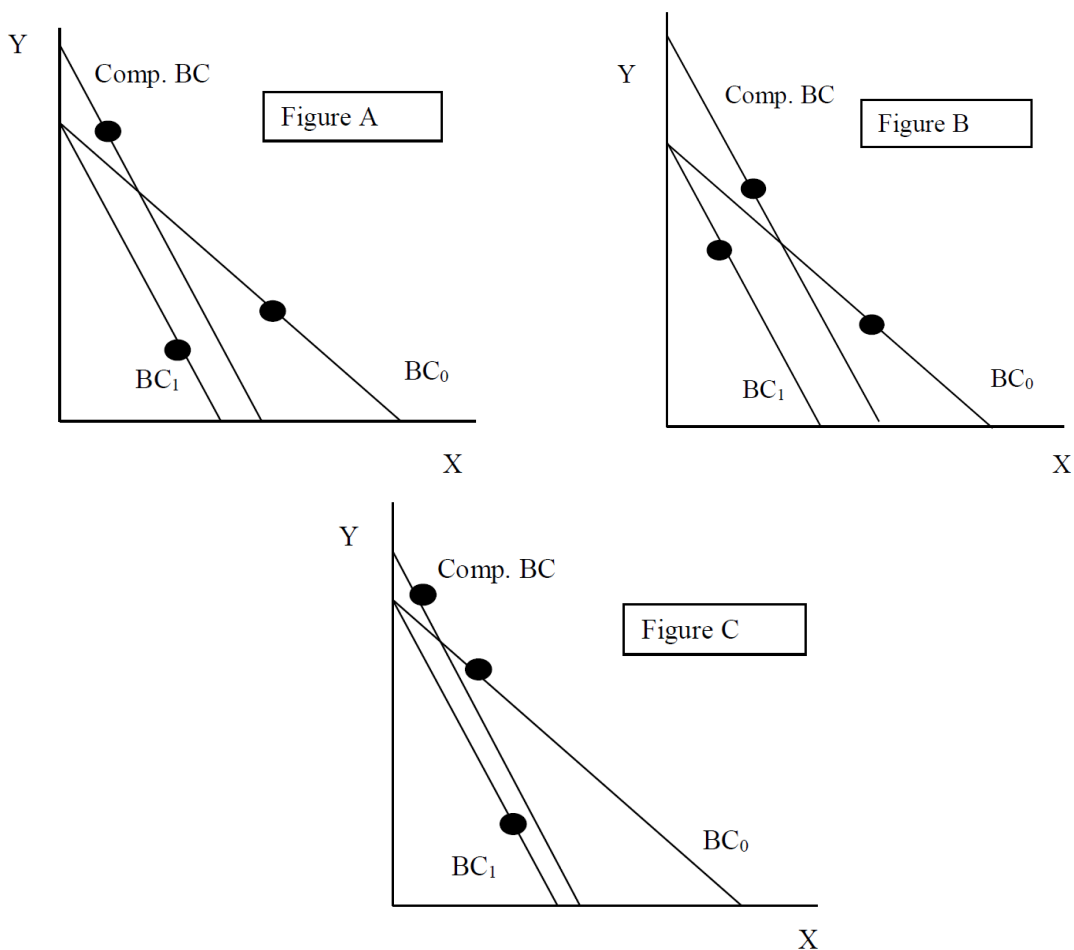


Quiz #4 (20 points total) **answer key**  
 ECNS 204  
 Snowmester 2020

1.) Suppose you consume goods X and Y. Further, suppose there is an increase in the price of good X. In the diagrams below, the black dots represent points where the illustrated budget constraints are tangent to indifference curves (to avoid clutter, the indifference curves have not been drawn).



a.) In which figure is X a normal good?

**B**

As income shifts out (i.e., from  $BC_1$  to the Comp. BC), we require an increase in the amount of X consumed for it to be a normal good. This only happens in figure B.

b.) In which figure is X a Giffen good?

**C**

If the price of X goes up, we require the amount of X consumed to fall. Here, we compare the tangencies with  $BC_0$  and  $BC_1$ . In Figure C, we see that the tangency with  $BC_1$  is further to the right on the horizontal axis than the tangency with  $BC_0$ . Hence, X is a Giffen good in Figure C.

2.) True or False. A supply-side tax on a market for an immobile resource leads to economic inefficiency (i.e., leads to a dead weight loss).

False. Because supply cannot adjust, the equilibrium point remains the same and there is no DWL.

3.) True or False. Consider our classroom example involving the market for gasoline. Suppose a per-unit tax is imposed on consumers rather than sellers. If the tax is imposed on consumers, the DWL gets bigger.

False. DWL stays the same size.