

Review Quiz

Which of the following has correct direction for mass transfer in absorption process

- A. Gas phase to liquid phase
- B. Liquid phase to gas phase
- C. Gas phase to gas phase
- D. Liquid phase to liquid phase

Review Quiz

Which of the following has correct direction for mass transfer in stripping process

- A. Gas phase to liquid phase
- B. Liquid phase to gas phase
- C. Gas phase to gas phase
- D. Liquid phase to liquid phase

Review Quiz

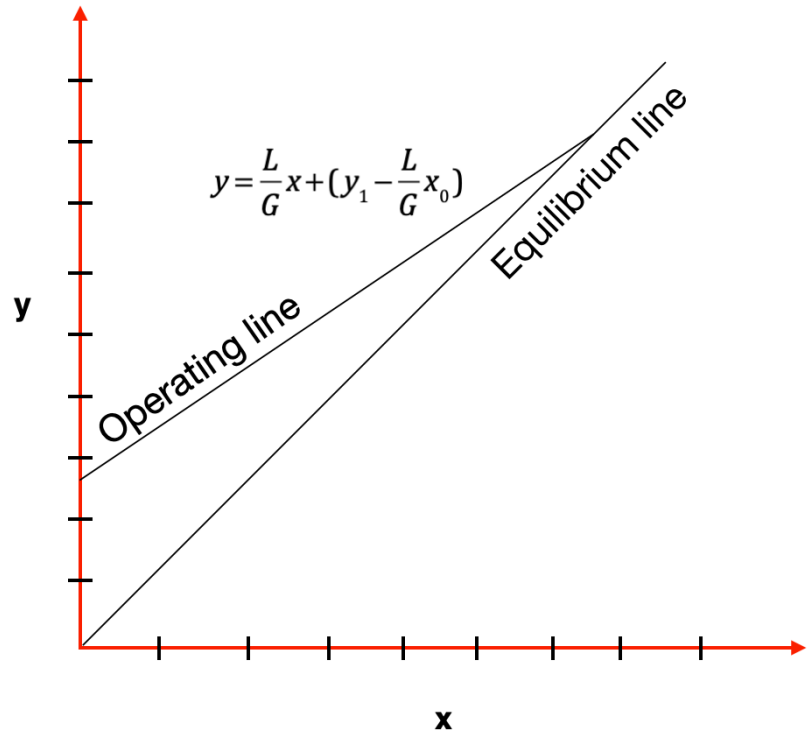
Why does liquid from fizzy drink bottle tend to explode out when a bottle is shaken before opening

- A. Liquid becomes explosive at atmospheric pressure.
- B. There is a chemical reaction of liquid with air.
- C. The dissolved gas reacts with air.
- D. The equilibrium between liquid and gas changes as pressure is changed.

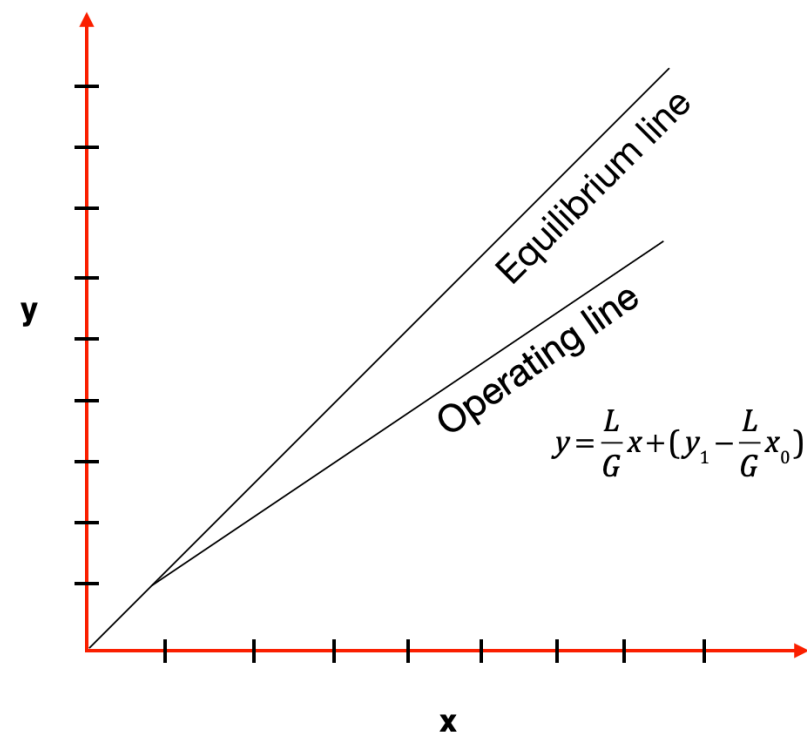
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Which one represents the case of using minimum amount of absorbent?

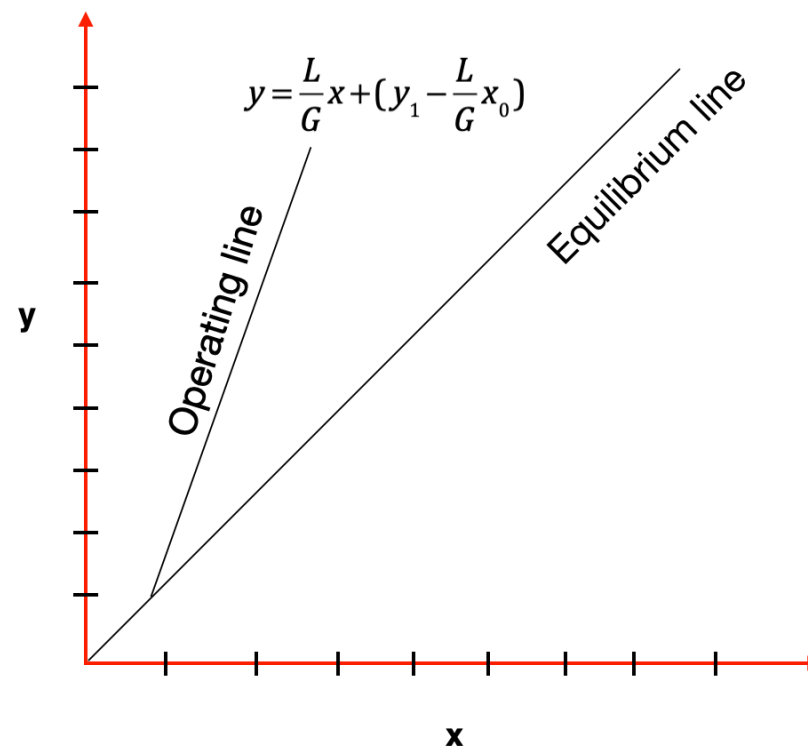
A.



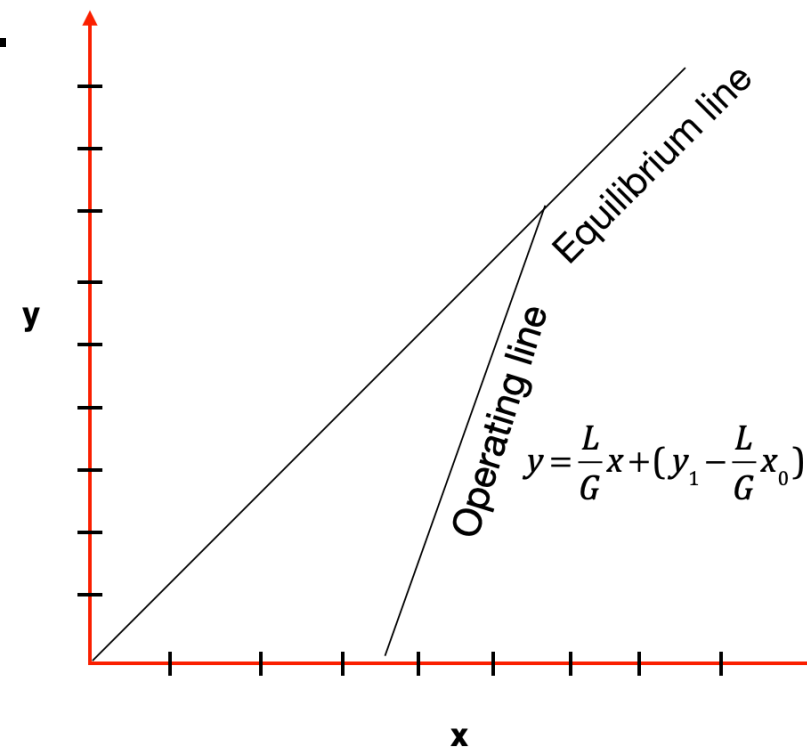
B.



C.

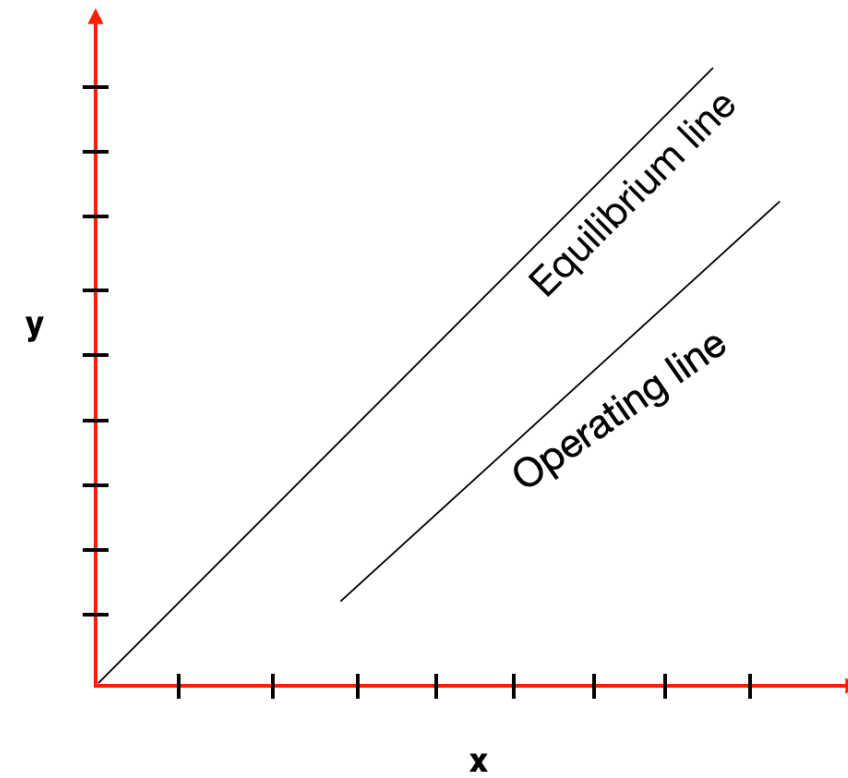
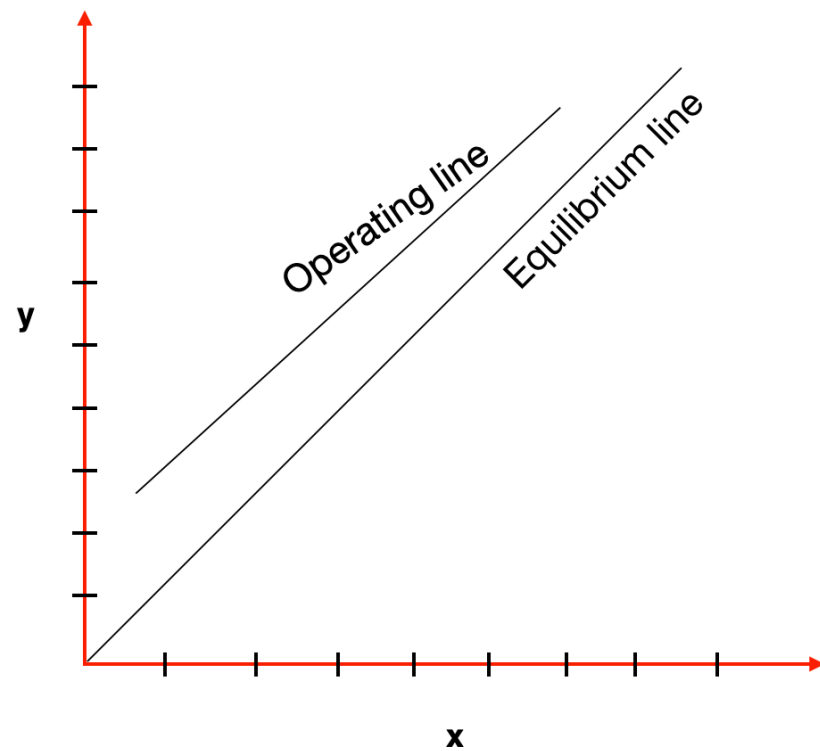


D.



Review Quiz

Why operating line is on the left side of the equilibrium line and not on the right side for absorption process



In-class exercise problem

100 mol/hr of natural gas containing 1.5% H_2S at 1 atm is to be processed to reduce concentration of H_2S by 10 fold. An absorbent is being used to remove H_2S where the mole fraction of H_2S in the inlet absorbent stream is 0.00001. Calculate number of needed equilibrium-staged absorption stages if $L/G = 1.2 (L/G)_{\min}$. Calculate the exit concentration of absorbent. Henry coefficient is 50 bar.

