You will bubble in your answers to the take-home questions during class along with the in-class portion.

For items 1-15, answer yes (A) or no (B) regarding whether the numbered item correctly completes the statement above it or correctly answers the question posed. For each set, any combination of correct statements is possible (including all correct or none correct).

Dyspnea has been defined as an “abnormal uncomfortable awareness of breathing” (Harrison’s, Chapter 33). A more pathophysiologic formulation might be that dyspnea is the emotional distress caused by the perception that either adequate gas exchange cannot be attained (“air hunger” caused by inability to respond adequately to respiratory drive) or that there is a mismatch between the expectation and perception with regard to the work of breathing.

In this case, there is evidence that the mechanism causing dyspnea is increased work of breathing due to:
1. Decreased lung compliance (due to cardiogenic pulmonary edema)
2. Decreased vital capacity
3. Increased airway resistance
4. Respiratory muscle weakness

Starling’s law for transit of fluid out of the vasculature is given in Harrison’s 16th edition (p. 204) and ascites is discussed in Harrison’s, Chapter 29. Use these references as needed to assess the following statements. They are not assigned per se.

In this case, the factors significantly contributing to the accumulation of fluid in the abdomen likely include increased:
5. Hydrostatic pressure gradient
6. Oncotic pressure gradient
7. Vascular or peritoneal permeability

The discussant ruled out increased pressure in the portal vein as the cause of ascites in this case because of the:
8. Difference between the albumin concentration in the plasma and the ascites fluid
9. Fact that the ascites fluid met the criteria for an exudate
10. Low volume of ascites fluid
11. Ratio of the albumin concentration in the plasma to that in the ascites fluid

Acute phase reactions and chronic effects of inflammatory cytokines have been discussed in a previous handout and are further discussed in Harrison’s 16th edition. Use these references as needed to assess the following statements. They are not assigned per se.

In this case, which of the following findings are likely the result of pro-inflammatory cytokines such as TNF and IL1?
12. Anemia
13. Fever
14. Leukocytosis
15. Weight loss