QUIZ on Lecture P1_Wk1_L5

1. Suppose two molecules interact through the Keeson interaction. Which of the four curves on the plot below best describes how the interaction force varies with separation distance between the two molecules?

- a) Line a
- b) Line b
- c) Line c
- d) Line d

2. The Keeson interaction force varies with separation distance $z$ as

- a) $z^{-3}$
- b) $z^{-4}$
- c) $z^{-5}$
- d) $z^{-6}$
- e) $z^{-7}$

3. Suppose you have molecules in the gas phase interacting one with another. What physical parameter might you vary to help decide whether the Keeson or the Debye interaction is dominant?

- a) pressure of the gas
- b) temperature of the gas
- c) mass of each molecule
- d) an external magnetic field