1) In the figure below a patient on the volume-controlled mode with constant flow and PEEP of 12 cmH\textsubscript{2}O, what is the Stress Index?

A) < 1  
B) 1  
C) > 1  

2) What would you do to the PEEP level?

A) Increase PEEP  
B) Decrease PEEP  
C) No change  
D) Not enough information
3) The Pressure-Volume curve below, how much PEEP would you apply?

A) 0 cmH₂O  
B) 5 cmH₂O  
C) 10 cmH₂O  
D) 15 cmH₂O

4) In the same patient, the Driving Pressure should be less than?

A) 20 cmH₂O  
B) 30 cmH₂O  
C) 40 cmH₂O

5) Pressure and Flow overshoot seen in the figure below could be secondary to?

A) High pressure support levels  
B) Very short rise time  
C) Restrictive lung disease  
D) All of the above
6) In the figure below, what kind of respiratory pattern is shown?

A) Kussmaul breathing  
B) Cheyne-Stokes Respiration  
C) Auto trigger  
D) Tachypnea

7) In the figure below showing the airway pressure (1<sup>st</sup> yellow), flow (2<sup>nd</sup> pink), pleural pressure (3<sup>rd</sup> orange), and transpulmonary pressure (4<sup>th</sup> orange), PEEP level should be?

A) Increased  
B) Decreased  
C) Unchanged  
D) Not enough information
8) The Flow-Volume curve below shows signs of:

A) Delay trigger
B) Auto-PEEP
C) Air-leak

9) The volumetric capnography figure below shows a normal (dotted grey line), the blue line most probably describes what condition?

A) ARDS
B) COPD
C) Normal
D) Artifact
10) In the figure below showing the airway pressure (1st yellow), flow (2nd pink), pleural pressure (3rd orange), and transpulmonary pressure (4th orange). The white arrows point to?

A) Ineffective effort
B) Expiratory pause
C) Inspiratory pause
D) A & B