Mechanical Power

1) Mechanical power refers to the amount of energy delivered by the ventilator per minute in J/min

A) True
B) False

2) Mechanical power formula represent the Volume and Pressure x Respiratory rate x ?

A) 0.098
B) 1.098
C) 0.998
D) 0.889

3) Components of the Mechanical Power include:

A) Static elastic
B) Static dynamic
C) Resistive
D) All of the above

4) Inspiratory work include:

A) Static elastic + static dynamic
B) Static elastic + resistive
C) Dynamic elastic + resistive
D) Elastic + resistive

5) Assuming same compliance, resistance, tidal volume, pressure and respiratory rate, which mode produce less Mechanical Power?

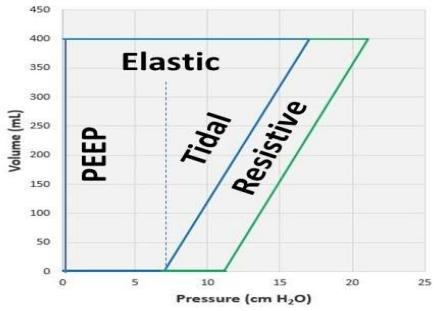
A) Volume-Controlled mode
B) Pressure-Controlled mode
C) Same
D) Can't be determined

6) The most accurate way to calculate the Mechanical Power is:

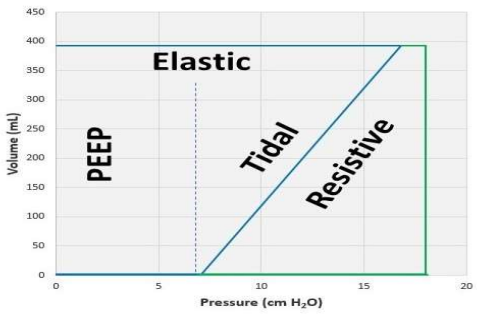
A) Gattinoni's equation
B) Giosa's equation
C) Becher's equation
D) The integral of the Pressure-Volume curve

7) In the figure below, which one represent volume-controlled mode (VCV) and pressure-controlled mode (PCV)?

A



B



A) A: VCV - B: PCV
B) A: PCV – A: VCV
C) Both are VCV
D) Both are PCV

8) Newer Adaptive modes like ASV and AVM might:

A) lower the Mechanical Power
B) Increase the Mechanical Power
C) No effect

9) Trans-pulmonary mechanical power takes in account the?

A) Respiratory system elastance
B) Respiratory system resistance
C) Lung elastance
D) Chest wall elastance

10) Mechanical power has shown to be related to:
A) Ventilator induced lung injury
B) Mortality
C) Both
D) Neither