RSPT 1050 - Module B

1. Calculate the normal V_t if the patient's ideal body weight is 160 lbs.

   $160lbs \times \frac{1kg}{2.2lbs} = 72.7kg$ $72.7kg \times 5\frac{mL}{kg} = 364mL$

   $72.7kg \times 8\frac{mL}{kg} = 582mL$

2. Calculate the normal V_t if the patient's ideal body weight is 200 lbs.

   $200lbs \times \frac{1kg}{2.2lbs} = 90.9kg$ $90.9kg \times 5\frac{mL}{kg} = 455mL$

$90.9kg \times 8\frac{mL}{kg} = 727mL$

3. Calculate the normal V_t if the patient's ideal body weight is 120 lbs.

   $120lbs \times \frac{1kg}{2.2lbs} = 54.5kg$ $54.5kg \times 5\frac{mL}{kg} = 273mL$

$54.5kg \times 8\frac{mL}{kg} = 436mL$

4. If the V_t is 300 mL and the T_i is 0.8 seconds, calculate the flowrate.

   $\frac{300mL}{0.8\,\text{sec}} = 375\,mL/\text{sec}$

5. If the V_t is 600 mL and the T_i is 0.7 seconds, calculate the flowrate.

   $\frac{600mL}{0.7\,\text{sec}} = 857\,mL/\text{sec}$

6. If the V_t is 800 mL and the T_i is 2.5 seconds, calculate the flowrate.

   $\frac{800mL}{2.5\,\text{sec}} = 320\,mL/\text{sec}$

7. If the V_t is 700 mL and the T_i is 2.2 seconds, calculate the flowrate.

   $\frac{700mL}{2.2\,\text{sec}} = 318\,mL/\text{sec}$

8. If the V_t is 400 mL and the T_I is 1.2 seconds, calculate the flowrate.

   $\frac{400mL}{1.2\,\text{sec}} = 333\,mL/\text{sec}$

9. If the V_t is 650 mL and the T_i is 1.5 seconds, calculate the flowrate.

$$\frac{\mathbf{650}\boldsymbol{mL}}{\mathbf{1.5}\,\text{sec}} = \mathbf{433}\,\boldsymbol{mL}/\text{sec}$$

10. If the V_t is 900 mL and the T_i is 3 seconds, calculate the flowrate.

$$\frac{\mathbf{900}\boldsymbol{mL}}{\mathbf{3.0}\,\text{sec}} = \mathbf{300}\,\boldsymbol{mL}/\text{sec}$$