

## RSPT 1050 - Module B

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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