

NOT ON VENTILATOR!

$$70 \text{ kg} \Rightarrow \frac{7 \text{ cc}}{\text{kg}} \times 70 = 490 \text{ cc TIDAL VOLUME PER BREATH}$$

NEED 60 cc/kg/min TO MAINTAIN EUCAPNIA, $p\text{CO}_2 = 40$

\therefore need to move $60 \times 70 \text{ kg} = 4200 \text{ cc per minute}$ to keep $p\text{CO}_2 = 40$

$$\therefore \frac{4200}{490} = 8.6 \text{ breaths/min}$$

ON VENTILATOR

70 kg on ventilator (↑ d' DEAD SPACE FROM VENTILATOR TUBING / CIRCUIT)

NEED 120 cc/kg/min TO MAINTAIN EUCAPNIA,

\therefore NEED TO MOVE $120 \times 70 \text{ kg} = 8400 \text{ cc PER MINUTE}$ TO KEEP $p\text{CO}_2 = 40$

$$\therefore \frac{8400}{490 \text{ cc/breath}} = 17 \text{ breaths/min}$$