

Halee Alsabrook  
IM7 Math

$$1. \text{gtt/min} = \frac{250(15)}{180} = \boxed{21 \text{ gtt/min}}$$

Drops per min =  
 $\frac{\text{total volume (mL)} \times \text{drop factor (gtt)}}{\text{time in mins}}$

$$2. \text{gtt/min} = \frac{50(60)}{30} = \boxed{100 \text{ gtt/min}}$$

$$3. \text{gtt/min} = \frac{250(15)}{60} = 62.5 / 2 = \boxed{31 \text{ gtt/min}}$$

$$4. \text{gtt/min} = \frac{100(12)}{60} = \boxed{20 \text{ gtt/min}}$$

$$5. \text{mL/hr} = \frac{1000}{8} = \boxed{125 \text{ mL/hr}}$$

$$6. \text{mL/hr} = 1000 / 4 = \boxed{250 \text{ mL/hr}}$$

$$7. \text{mL/hr} = 250 / 1.5 = \boxed{167 \text{ mL/hr}}$$

$$8. \frac{D}{H}(V) = \frac{75}{100}(2) = \boxed{1.5 \text{ mL}}$$

$$9. D/H(V) = 5/20(5) = \boxed{1.25 \text{ mL}}$$

$$10. D/H(V) = 2/10(1) = \boxed{0.2 \text{ mL}}$$

$$11. \text{Conc: } \frac{50 \text{ mg}}{500 \text{ mL}} = 0.1 \text{ mg}(1000) = 100 \text{ mcg/mL} + 175 \div 2.2 = 79.5 \text{ kg}$$

$$\downarrow$$
$$\frac{100(142)}{79.5(60)} = \frac{14,200}{4,770} = 2.97 \approx \boxed{3 \text{ mcg/kg/min}}$$

$$12. \frac{250 \text{ mg}}{500 \text{ mL}} = 0.5(1000) = 500 \text{ mcg/mL}$$

$$\frac{70 \text{ kg}(1)(60)}{500 \text{ mcg/mL}} = \frac{4200}{500} = 8.4 \approx \boxed{8 \text{ mL/hr}}$$

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$$13. \frac{100\text{mg}}{250\text{mL}} = 0.4\text{mg}(1000) = 400\text{mcg/mL}$$

$$\frac{400(12)}{60} = \boxed{80\text{mcg/min}}$$

$$14. \frac{800\text{mg}}{500\text{mL}} = 1.6\text{mg}(1000) = 1600\text{mcg/mL} \quad 165/2.2 = 75\text{kg}$$

$$\frac{75(2)(60)}{1600} = \frac{9000}{1600} = 5.625 \approx \boxed{5.6\text{mL/hr}}$$

$$\star 15. \frac{4(60)}{64} = 3.75 = \boxed{3.6\text{mL/hr}}$$

$$16. \frac{50(15)}{65(60)} = \frac{750}{3900} = \boxed{0.19\text{mcg/min}}$$

$$17. 500/25000(250) = \boxed{5\text{mL/hr}}$$

$$18. 5/100(250) = \boxed{13\text{mL/hr}}$$

$$19. 4\text{mL}/1000 = 0.004\text{L}$$

$$4\text{mL}(50)(90.9) = 200(90.9) = 18.182\text{mL} \approx \boxed{18\text{L}}$$

$$20. 4\text{mL} \times \text{TBSA} \times \text{kg}$$

$$\downarrow$$
$$4\text{mL}(75)(68.18) = 300(68.18) = 20454/100 = \boxed{20\text{L}}$$