

$$1. \frac{30 \text{ mg}}{500 \text{ mL}} \times 1000 = 60 \text{ mg/mL}$$

$$\frac{4 \text{ mg}}{500 \text{ mL}} \times 1000 = 8 \text{ mg/mL}$$

$$\frac{60 \text{ mcg}}{60 \text{ min}} = 1 \text{ mcg/min}$$

$$\frac{500 \text{ mL}}{30 \text{ mg}} \times \frac{100 \text{ mcg}}{1 \text{ min}} \times \frac{60 \text{ min}}{1 \text{ hr}}$$

$$.06 \times 1000 = 60 \text{ mg/mL}$$

$$\frac{8}{60} = .13 \text{ mcg/min}$$

$$\frac{.5 \text{ mcg/min}}{.13 \text{ mcg/min}} = 4 \text{ mL/hr}$$

2.

$$12 \text{ units} \times 90 \text{ kg} = 1080 \text{ units/hr}$$

$$5 \text{ mcg} \times 90 = 450 \text{ mcg/min}$$

$$10 \text{ mg} \times 1000 = \frac{10,000 \text{ mcg}}{60} = 166.7$$

$$\frac{450}{166.7} = 3 \text{ mL/hr}$$

1. renal failure
2. raise BP
3. sedation
4. client is allergic to calcium channel blockers
5. ↑ heart rate due to stress
6. give med slow due to adverse effects