

1) $a = \frac{1000\text{mL}}{150\text{mL/hr}} = 7\text{mL/hr}$

$b = \frac{150 \times 10}{60} = 25\text{gtts/min} - \text{macro}$

$= \frac{150 \times 60}{60} = 150\text{gtts/min} - \text{micro}$

C = macro tubing.

6) $a = 1000\text{mg in } 10\text{mL}$

add 5mL aminophylline to make 500mg in 250 mL D5W

$\frac{50\text{mg}}{1000\text{mg}} \times 10\text{mL} = 5\text{mL}$ ↑

$b = \frac{250\text{mL}}{8\text{hr}} = 31\text{mL/hr}$

C = micro tubing.

2) $a = \frac{100\text{mL}}{360} \times 10 = 3\text{gtts/min} - \text{macro}$

$= \frac{100\text{mL}}{360} \times 60 = 17\text{gtts/min} - \text{micro}$

b = micro tubing

7) $125 \times 20 = 2500\text{mL}$

$75 \times 4 = 300$

$2500 + 300 = 2800\text{mL}$

8) $a = 90\text{mL/hr}$

$b = \frac{1000}{90} = 11\text{hr.}$

3) $a = \text{Set IV pump to infuse } 150\text{mL}$

$b = \frac{150}{180} \times 15 = 13\text{gtts/min}$

$\frac{150}{180} \times 60 = 50\text{gtts/min}$

C = micro tubing.

9) $0.5\text{g} = 500\text{mg}$

$50\text{mL/hr} = 50\text{mg}$

10) $a = \text{Need } 75\text{mL D5W}$
 take 100mL bag, waste 25mL for 75mL
 add 5mL bactrim to 75mL
 need to infuse for 60min

$b = \frac{75\text{mL} \times 60}{90\text{min}} = 50\text{mL/hr}$

11) $\frac{3}{4} \times 500\text{mL} = 250\text{mL Isocal}$

$150\text{mL} - 112.5\text{mL} = 37.5\text{mL water}$

12) $\frac{1}{2} \times 500\text{mL} = 250\text{mL Vivonex}$

$500\text{mL} - 250\text{mL} = 250\text{mL water}$

4) $a = \frac{500\text{mL}}{24} = 21\text{mL/hr}$

13) $25\% = 0.25$

$0.25 \times 400\text{mL} = 100\text{mL osmolite}$

$400\text{mL} - 100\text{mL} = 300\text{mL water}$

14) 0 mL of water

5) $a = 100\text{mg powder to } 250\text{mL D5W.}$
 give IVPB over 1 hr.

$b = \frac{250}{60} \times 10 = 42\text{gtts/min}$