Med Math assignment

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p244

1) O- 1000mL, run 150mL/hour IV
S- 1000 mL

X = gtt/min 150 mL/hr 1hrs/60min 10gtt/mL 1500/60 = 25

X = gtt/min 150mL/hr 1hr/60min 60gtt/mL 150

a) 6.66 → 7hours
b) 25gtt/min macro — 150 gtt/min micro
c) macro

2) O- 100 mL 6 hrs = 360 mins
a) 17 gtt/min 30 gtt/min
b) micro

X = gtt/min 10gtt/mL 100mL/6hr 1hr/60mins 1000/360 2.77 2.8

X = gtt/min 60gtt/mL 100mL/6hr 1hr/60mins 16.666 6000/360

3) O- 150 mL 3hrs
S- 250 mL + macro - 15gtt/mL 60gtt/mL

Just let 150mL run + then stop
a)
b) 3×60 = 180mins
c) micro

waste 100mL

gtt/min 150mL/180mins 15gtt/mL 2250/180 12.5 — 13

gtt/min 150mL/180mins 60gtt/mL 9000/180 50

4) O- 500mL solve for 24hrs 500/24 20.83
= 21mL/hr

5) O- 100mg
S- 100 mg

100mg to 250 D5W + give over 1hr
a)
b) 42gtt/min

gtt/min 10gtt/mL 250mL/1hr 1hr/60mins 2500/60 41.66
42gtt/min

6) O- 500 mg in 250 mL to run 8hrs
S- 1g in 10mL - micro

a) 5mL
b) 250/8 = 31.2 = 31mL/hour
micro 31gtt/min

7) 125×20 = 2500 + 300 = 2800mL

8) O- 1000mL to run at 90mL/hr
S-

a) 90mL/hr
b) 1000/90 = 11.1 = 11hrs

9) 50mg

10) O- 5mL in 60hr
S- 5mL, 5mL/7.5mL 60 mins

a) 75mL
b) 50 mL/hr

1500/100 2

11) .75 × 150 = 112.5 150 37.5 mL H_2O
112.5 isocal
37.5 water

12) .75 × 500 → 250
= 250 mL + 250
→ 250mL water
250mL vivonex

13) .25 × 400 = 100
300 mL H_2O + 100 osmo
100mL osmolite
300mL water

14) 500mL iso
0 H_2O
500mL isocal
0mL water

pg 260

1) O-800u/hr
S-25,000u in 250mL

a) ×mL/hr 250mL/25,000u 800u/hr 200000/25000 = 8
(8mL/hr)
b) 250mL/8mL/hr = 31.25 = (31 hrs)

2) O-500mg in 100mL over 1hr
S- 500mg in 100mL
gtt/min 500mg/1hr (100mL/hr)

3) O-24g in 24h
S- 24g in 1000mL
1000mL/24hrs (42mL/hr)

4) O- 10mg/hour IV
S- 125mg in 100mL
100mL/125mg 10mg/hr 1,000/125 (8mL/hr)

5) O-4mg/hr
S-100mg in 100mL
100/100 × 4/h 400/100 (4mL/hr)

6) O-15u/hr
S-125u in 250mL
a) rate (30mL/hr)
b) hr - (8hrs)
250m/125 15u/hr 3750

7) O-50mg in 250mL over 24h
S-
(10mL/hr)

8) O-1200u/hr
S- 25,000u in 500mL
a) rate (24mL/hr)
b) hr (21hrs)
500mL/25000 1200 600000

9) O-23u/hr
S-250u in 250mL
a) rate (23mL/hr)
b) hr (11hrs)
250mL/250 23u

10) O-100,000u/hr for 24hr
S- 750,000 u in 250mL
250/750,000 100000 25,000
rate
(33mL/hr)