1 Problems

Round to the nearest tenth.

1) A patient is to receive a fluid challenge of 500 mL of normal saline over 2 hours. The administration set has a drip factor of 155 gtt/mL. What should the drip rate be?

2) A patient is to receive 1 L of lactated Rinder's solution over 10 hours. A set with a drip factor of 10gtt/mL is to be used. What should the drip rated be?

3) If a child is to receive 30 mL/hr of dextrose 5 % in $\frac{1}{4}$ NS through a minidrip delivery set. What should the drip rate be?

4) If a patient is to receive 100mL/hour and the drip factor is 15gtt/mL, how many drops per minute should the nurse set the administration set to deliver?

5) The doctor orders 1 L of normal saline to run over 8 hours. The drip factor is 20gtt/mL. After 3 hours, the nurse finds 300 mL remain to be infused. What is the drip rate after recalculation?

6) Calculate the flow rate of 1000mL to run in over 8hrs with a set calibrated at 20 gtt/mL.

7) An IV of 1200mL is ordered to run for 16 hours. Calculate the flow rate if the set is calibrated at 15 gtt/mL?

8) An IV of 500 mL was ordered to infuse in 3 hours using a 15 gtt/mL set. With $\frac{1}{2}$ hours remaining you discover only 150 mL is left in the bag. At what rate will you need to reset the flow.

9) An IV of 800mL was started at 9 a.m. to infuse in 4 hours. At 10 a.m. 150mL have infused. The set is calibrated at 15 gtt/mL. Recalculate the flow rate in gtt/min.

10) An IV of 1000mL was scheduled to run in 12 hours. After 4 hours only 220 mL have infused. The set calibration is 20 gtt/mL. Recalculate the rate for the remaining solution.

11) A doctor orders 100mL of D5NS to infuse at 75mL/hr. Calculate how long the infusion is.

12) A patient has an IV of 1000 mL 5% D5W infusing at90mL/hr. How many hours will it take this IV to complete.

13) The doctor orders a volume of 250 mL to be infused at 30 mL per hour. You start the infusion at 12 noon. When will the IV be completed.

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14) The medication order is for 500mL of 5% D/W to infuse in 5 hours.

    (a) Calculate the flow rate in drops per minute if the drop factor is 15 drops per mL.

    (b) When the nurse later checks the infusion, 400 mL remain to be absorbed in 3 hours. Now you must recalculate the flow rate for the remaining 400mL

15) The prescriber ordered: 250L 5% D/W IV in 2.5 hr. Calculate the flow rate in mL per hour.

16) The prescriber orders: 2500mL 5% D/W in 24hr IV. The drop factor is 10 gtt/mL. What is the flow rate?

17) The order reads: 900 mL 5% D/0.45% NS IV 5hr. Calculate the drip rate when the drop factor is 10 gtt/mL

18) The order reads: 500mL 5% D/W in 4hr IV. The drop factor is 10 gtt/mL. Calculate the drip rate.

19) The order reads: 1000 mL 9% NS to infuse in 8 hours IV. The flow rate is 21 drops per minute. Four hours later, 400 mL remained in the IV bag. Recalculate the drip rate. The drop factor is 15 gtt/mL.

20) The Physician ordered 500 mL D/5/0.45% N/S to infuse in 5 hours. One hour later, 300 mL remained. Recalculate the drip rate if the drop factor is 15 gtt/min.

2 Answers/Solutions

1) 645.8 gtt/min
2) 16.6 gtt/min
3) 30 gtt/min
4) 25 gtt/min
5) 20 gtt/min
6) 41.7 gtt/min
7) 18.8 gtt/min
8) 75 gtt/min
9) 54.2 gtt/min
10) 32.5 gtt/min
11) 1 hours 20 minutes
12) 11 hours 7 minutes
13) 8 : 20 PM (8h20)
14) (a) 25 gtt/min
    (b) 33.3 gtt/min
15) 100000 mL/hour
16) 17.4 gtt/min
17) 30 gtt/min
18) 20.8 gtt/min
19) 25 gtt/min
20) 18.8 gtt/min