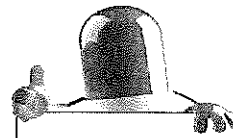


NAME _____

DATE _____

ACCEPTABLE SCORE 14

YOUR SCORE _____



POSTTEST 1



DIRECTIONS: The IV fluid order is listed in the problem. Calculate the appropriate infusion rate for each problem. Show your work. Follow your instructor's rules on rounding final answers.

1. A patient with hypotension has an order for 500 mL of plasma protein fraction to be infused over 2 hours. How many milliliters per hour should the IV pump be programmed for? _____
2. An order is received to infuse amphotericin B 240 mg in 500 mL D₅W over 4 hours. How many milliliters per hour should the IV pump be programmed for? _____
3. An NPO patient has an order for 0.9% NS at 120 mL/h. The drop factor is 12 gtt/mL. How many drops per minute should be given? _____

LOT	EXP		
—	⊙	⊙	281224 NDC 0338-0404 001 0000208
—			0.9% Sodium Chloride Injection USP
—			1000 mL
—			Each 100 mL contains 900 mg Sodium Chloride USP pH 5.0 (4.5 to 7.0) mEq/L Sodium 154 Chloride 154 Osmolality 308 mOsm/L (calc) STERILE Nonpyrogenic Single dose container. Solutions may be incompatible. Consult with pharmacist if available. When introducing additives use aseptic technique. Mix thoroughly. Do not store. Do not use. Intended for use directly by a physician. See directions. Caution: Squeeze and inspect inner bag which maintains product sterility. Discard if leaks are found. Must not be used if series connections. Do not use unless solution is clear. FEDERAL (USA) LAW PROHIBITS DISPENSING WITHOUT PRESCRIPTION. Store unit in moisture barrier overwrap at room temperature (25°C/77°F) until ready to use. Avoid excessive heat. See insert.
—			Baxter BAXTER HEALTHCARE CORPORATION DEERFIELD IL 60015 USA Made in USA Distributed in Canada by Baxter Corporation Toronto Ontario Canada
—			Valley® container PL 1460 PLASTIC FOLIOLENE® POLYMER Call 1-800-933-6333
—	⊙	⊙	

4. After a burn injury Mr. Warren is to receive 500 mL of blood plasma over 4 hours. The tubing drop factor is 15 gtt/mL. How many drops per minute should be given? _____

5. A postpartum patient is to receive 1500 mL of LR over the next 8 hours. How many milliliters per hour should the IV pump be programmed for? _____

LOT EXP

282324
NDC 6336-0174-4
DIN 00061085

**Lactated Ringer's
Injection USP**

1000 mL

EACH 100 mL CONTAINS 600 mg Sodium Chloride USP
310 mg Sodium Lactate 30 mg Potassium Chloride USP
20 mg Calcium Chloride USP (14.5 (8.0 TO 7.5) mEq/L)
Sodium 130 Potassium 4 Calcium 2.7 Chloride 109
Lactate 28 Osmolality 273 mOsmol (CALC) STERILE
ISOTONIC SINGLE DOSE CONTAINER. NOT FOR USE IN THE
TREATMENT OF LACTIC ACIDOSIS. ADDITIVES MAY BE
NECESSARY. CONSULT WITH PHARMACIST IF AVAILABLE. WHEN
INTRODUCING ADDITIVES USE ASEPTIC TECHNIQUE. MIX
THOROUGHLY. DO NOT STORE. DOSAGE: INTRAVENOUSLY AS
DIRECTED BY A PHYSICIAN. SEE DIRECTIONS. CAUTIONS:
SQUEEZE AND INSPECT AMPUL BUD WHICH INDICATES PRODUCT
STERILITY. DISCARD IF LEAKS AND BUBBLES. MUST NOT BE USED IN
SERIES CONNECTIONS. DO NOT ADMINISTER SINGLE-DOSE PRODUCT
WITH BLOOD. DO NOT USE UNLESS SOLUTION IS CLEAR. FEDERAL
(USA) LAW PROHIBITS DISPENSING WITHOUT PRESCRIPTION.
STORE UNIT IN MOISTURE BARRIER OVERWRAP AT ROOM
TEMPERATURE (25°C/77°F) UNTIL READY TO USE. AVOID
EXCESSIVE HEAT. SEE INSERT.

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VALEN O CONTAINER
PL 1450 PLUNG
FOR PRODUCT INFORMATION
CALL 1-800-833-0303

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6. A patient is admitted with pernicious anemia. The licensed prescriber orders a unit of packed red blood cells (250 mL) to be infused over 3 hours. The tubing drop factor is 12 gtt/mL. How many drops per minute should be given? _____

7. An order for 1000 mL of LR over 12 hours is received. The tubing drop factor is 15 gtt/mL. How many drops per minute should be given? _____

LOT EXP

282324
NDC 6336-0174-4
DIN 00061085

**Lactated Ringer's
Injection USP**

1000 mL

EACH 100 mL CONTAINS 600 mg Sodium Chloride USP
310 mg Sodium Lactate 30 mg Potassium Chloride USP
20 mg Calcium Chloride USP (14.5 (8.0 TO 7.5) mEq/L)
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8. A patient with hypomagnesemia has an order for infusion of magnesium sulfate 2 g diluted in 50 mL D₅W. Policy states that the magnesium be infused at a rate of 1 g/h. How many milliliters per hour should the IV pump be programmed for? _____

MAGNESIUM SULFATE
 IN WATER FOR INJECTION

2g
 TOTAL (0.325 mEq Mg⁺⁺/mL) **40** mg/mL

9. An order for NS to be infused at 150 mL/h after a transesophageal echocardiogram is received. The tubing drop factor is 60 gtt/mL. How many drops per minute should be given? _____

LOT	EXP		
—	⊙	⊙	1
		281324 NDC 0339-0049-04 DIN 00660208	
		0.9% Sodium Chloride Injection USP	2
			3
			4
		1000 mL	
		EACH 100 mL CONTAINS 900 mg SODIUM CHLORIDE USP pH 5.0 (4.5 TO 7.0) mEq/L SODIUM 154 CHLORIDE 154 OSMOLARITY 308 mOsm/L (CALC) STERILE NONPYROGENIC SINGLE DOSE CONTAINER ADDITIVES MAY BE INCOMPATIBLE CONSULT WITH PHARMACIST IF AVAILABLE WHEN INTRODUCING ADDITIVES USE ASEPTIC TECHNIQUE MIX THOROUGHLY DO NOT STORE DOSAGE INTRAVENOUSLY AS DIRECTED BY A PHYSICIAN SEE DIRECTIONS CAUTIONS SQUEEZE AND INSPECT INNER BAG WHICH MAINTAINS PRODUCT STERILITY DISCARD IF LEAKS ARE FOUND MUST NOT BE USED IN SERIES CONNECTIONS DO NOT USE UNLESS SOLUTION IS CLEAR FEDERAL (USA) LAW PROHIBITS DISPENSING WITHOUT PRESCRIPTION STORE UNIT IN MOISTURE BARRIER OVERWRAP AT ROOM TEMPERATURE (25°C/77°F) UNTIL READY TO USE AVOID EXCESSIVE HEAT SEE INSERT	5
			6
			7
		Baxter BAXTER HEALTHCARE CORPORATION DEERFIELD IL 60015 USA	8
		MADE IN USA DISTRIBUTED IN CANADA BY BAXTER CORPORATION TORONTO ONTARIO CANADA	
		VALIEX® CONTAINER PL 1460 PLASTIC FOR PRODUCT INFORMATION CALL 1-800-833-0303	
		♻️	9
—	⊙	⊙	

10. A patient has an order for 2500 mL of TPN to be infused over 24 hours. How many milliliters per hour should the IV pump be programmed for? _____

11. A patient with hypokalemia and hypophosphatemia has an order for potassium phosphate 30 milliosmole in 200 mL of 0.9% NS IV. The facility's policy states to infuse the potassium phosphate at 10 mOsm/h. How many milliliters per hour should the IV pump be programmed for? _____

12. A postoperative patient has an order for ceftazidime 1 g in 25 mL of D₅W over 15 minutes. The tubing drop factor is 60 gtt/mL. How many drops per minute should be given? _____
13. The licensed prescriber orders morphine sulfate 15 mg/h IV for a patient with metastatic cancer. Given a bag with a concentration of 100 mg of morphine sulfate in 200 mL of D₅W, how many milliliters per hour should the IV pump be programmed for? _____
14. A patient with an infection has an order for meropenem 1 g in 100 mL of D₅W IV q 8 h over 30 minutes. How many milliliters per hour should the IV pump be programmed for? _____
15. Timentin 3.1 g in 100 mL of D₅W IV over 1 hour is ordered for a patient with sepsis. The drop factor is 60 gtt/mL. How many drops per minute should be given?

ANSWERS ON PP. 469-470 AND 471-474..