1. An IV will be administered using an infusion pump that delivers mL/hr. Lactated Ringer's (Lactated Ringer's Solution) has been prescribed to run IV at a rate of 95 mL/8 hrs. The IV should infuse at how many mL/hr?

2. An IV will be administered using an infusion pump that delivers mL/hr. Dextran 40 has been prescribed to run IV at a rate of 500 mL/30 min. The IV should infuse at how many mL/hr?

3. You need to verify that a prescribed dose of Apresoline (Hydralazine Hydrochloride) for a patient currently weighing 70 lbs is safe. The drug literature recommends a maximum of 7.5 mg/kg/day. The drug is administered in 2 divided doses over a 24-hr period. You determine that a maximum safe dose for this patient would be ___ mg per dose.

4. Unipen (Nafcillin Sodium) is available in mg. 0.75 g of Unipen must be prepared. How many mg of Unipen should be prepared?

5. 1/6 gr of Morphine must be prepared. Morphine is available in mg. How many mg of Morphine should be prepared?

6. An IV solution contains 25 mg of Nicardipine Hydrochloride. 25 mg of Nicardipine Hydrochloride is equivalent to how many mcg?

7. 0.15 g of Ritodrine in D5W has been prescribed for IV infusion at a rate of 200 mcg/min. The IV solution has a total volume of 500 mL. The IV should be infused at how many mL per hr?

8. 1,000 mL of D5 in 0.9% NaCl (5% Dextrose in 0.9% Sodium Chloride) has been prescribed for IV infusion over 4 hrs. You are using an IV administration set that delivers 20 gtts/mL. You run the IV at ___ gtts/min.

9. You need to verify that a prescribed dose of Azactam (Aztreonam) for a patient currently weighing 9.6 kg is appropriate. The drug literature recommends 50 mg/kg/dose. You determine that an appropriate dose for this patient would be ___ mg per dose.

10. 250 mL of D5 in Lactated Ringer's (5% Dextrose in Lactated Ringer's Solution) has been prescribed for IV infusion over 1 hr. You are using an IV administration set that delivers 15 gtts/mL. You run the IV at ___ gtts/min.

11. 1/200 gr of Scopolamine must be prepared. Scopolamine is available in mg. How many mg of Scopolamine should be prepared?

12 . An adult weighs 154 lbs. You determine that 154 lbs is equivalent to ___ kg.

13 . An infant weighs 2400 g. You determine that 2400 g is equivalent to ___ kg.

14 . Acetohexamide is available in mg. 0.125 g of Acetohexamide must be prepared. How many mg of Acetohexamide should be prepared?

15 . A child weighs 21 lbs, 10 oz. You determine that 21 lbs, 10 oz is equivalent to ___ kg.

16 . An IV of D5W containing 0.12 g of Lidocaine and a total volume of 100 mL is to be infused at a rate of 1.2 mg/min. At how many mL/hr will you infuse the IV?

17 . 20 mg scored tablets of Ritalin are available. How many tablets should be administered if 10 mg of Ritalin is prescribed po?

18 . Atropine Sulfate is available in mg. 1/150 gr of Atropine Sulfate must be prepared. How many mg of Atropine Sulfate should be prepared?

19 . 1/120 gr of Atropine Sulfate must be prepared. Atropine Sulfate is available in mg. How many mg of Atropine Sulfate should be prepared?

20 . An IV solution contains 0.4 g of Dopamine. 0.4 g of Dopamine is equivalent to how many mg?

21 . 4 mg of Isuprel (Isoproterenol) in D5W has been prescribed for IV infusion at a rate of 5 mcg/min. The IV solution has a total volume of 500 mL. The IV should be infused at how many mL per hr?

22 . A child weighs 27 lbs, 11 oz. You determine that 27 lbs, 11 oz is equivalent to ___ kg.

23. Nafcillin has been prescribed for a patient currently weighing 18.6 kg. The drug literature recommends a maximum of 200 mg/kg/day. In checking the appropriateness of the drug order, you determine that ___ mg of Nafcillin would be a maximum safe dose per day.

24. Velosef (Cephradine) has been prescribed for a patient currently weighing 82 lbs. The drug literature recommends 25-50 mg/kg/day. In checking the appropriateness of the drug order, you determine that ___ to ___ mg of Velosef would be an appropriate dose per day.

25. Asparaginase has been prescribed for a patient currently weighing 14.1 kg. The drug literature recommends 200 units/kg/day. In checking the appropriateness of the drug order, you determine that ___ units of Asparaginase would be an appropriate dose per day.

26. Atropine Sulfate is available in mg. 1/100 gr of Atropine Sulfate must be prepared. How many mg of Atropine Sulfate should be prepared?

27. You have available an IV administration set that delivers 10 gtts/mL. D5 in Lactated Ringer's (5% Dextrose in Lactated Ringer's Solution) has been prescribed to run IV at a rate of 1,000 mL/10 hrs. The IV should infuse at how many gtts/min?

28. An IV solution contains 0.5 g of Dobutrex (Dobutamine). 0.5 g of Dobutrex is equivalent to how many mg?

29. 1/2 gr of Codeine Phosphate must be prepared. Codeine Phosphate is available in mg. How many mg of Codeine Phosphate should be prepared?

30. You need to verify that a prescribed dose of Bretylol (Bretylium Tosylate) for a patient currently weighing 21.1 kg is appropriate. The drug literature recommends 5 mg/kg/dose. You determine that an appropriate dose for this patient would be ___ mg per dose.

31. 1,000 mL of D2.5W (2.5% Dextrose in Water) has been prescribed for IV infusion over 12 hrs. You are using an IV administration set that delivers 60 gtts/mL. You run the IV at ___ gtts/min.

32. An IV of D5W containing 0.5 g of Dobutrex (Dobutamine) and a total volume of 250 mL is to be infused at a rate of 500 mcg/min. At how many mL/hr will you infuse the IV?

33. An IV of D5W containing 20 mg of Primacor (Milrinone Lactate) and a total volume of 100 mL is to be infused at a rate of 20 mcg/min. At how many mL/hr will you infuse the IV?

34. An IV will be administered using an infusion pump that delivers mL/hr. Lactated Ringer's (Lactated Ringer's Solution) has been prescribed to run IV at a rate of 12 mL/30 min. The IV should infuse at how many mL/hr?

35. Thioguanine has been prescribed for a patient currently weighing 110 lbs. The drug literature recommends 2-3 mg/kg/day. In checking the appropriateness of the drug order, you determine that ___ to ___ mg of Thioguanine would be an appropriate dose per day.

36. Codeine Phosphate is available in mg. 1/4 gr of Codeine Phosphate must be prepared. How many mg of Codeine Phosphate should be prepared?

37. A child weighs 29 lbs, 10 oz. You determine that 29 lbs, 10 oz is equivalent to ___ kg.

38. An infant weighs 12 lbs. You determine that 12 lbs is equivalent to ___ kg.

39. Sandostatin (Octreotide) is available in mg. 50 mcg of Sandostatin must be prepared. How many mg of Sandostatin should be prepared?

40. An IV of D5W containing 8 mg of Epinephrine and a total volume of 500 mL is to be infused at a rate of 20 mcg/min. At how many mL/hr will you infuse the IV?

41. 0.1 g of Nitroprusside in D5W has been prescribed for IV infusion at a rate of 150 mcg/min. The IV solution has a total volume of 250 mL. The IV should be infused at how many mL per hr?

42. A 1.5 g vial of powdered Unasyn (Ampicillin and Sulbactam) is available. Directions for reconstitution state: Add 3.2 mL of diluent to yield 375 mg in 1 mL. To prepare a dosage of 1.5 g how many mL of Unasyn should you withdraw from the vial after reconstituting the drug as directed?

43. 969 mg of Claforan (Cefotaxime) must be prepared. A 1 g vial of Claforan in powdered form is available. Directions for reconstitution state: Add 10 mL of diluent to yield 95 mg in 1 mL. After reconstituting the drug as directed, how many mL should you withdraw from the vial?

44. Rifampin has been prescribed for a patient currently weighing 82 lbs. The drug literature recommends 10-20 mg/kg/day. In checking the appropriateness of the drug order, you determine that ___ to ___ mg of Rifampin would be an appropriate dose per day.

45 . Colchicine is available in mg. 500 mcg of Colchicine must be prepared. How many mg of Colchicine should be prepared?

46 . Chlorthalidone is available in 50 mg scored tablets. 25 mg has been prescribed po. You should administer ___ tablets.

47 . An infant weighs 4400 g. You determine that 4400 g is equivalent to ___ kg.

48 . An IV of D5W containing 8 mg of Levophed (Norepinephrine Bitartrate) and a total volume of 250 mL is to be infused at a rate of 5 mcg/min. At how many mL/hr will you infuse the IV?

49 . An IV solution contains 0.1 g of Nitroglycerin. 0.1 g of Nitroglycerin is equivalent to how many mg?

50 . 500 mg of Chlorpromazine has been prescribed po. The Chlorpromazine is available in liquid form labeled 100 mg in 1 mL. You should administer ____ mL of the Chlorpromazine.

51 . 1 gr of Codeine Phosphate must be prepared. Codeine Phosphate is available in mg. How many mg of Codeine Phosphate should be prepared?

52 . An IV will be administered using an infusion pump that delivers mL/hr. D2.5W (2.5% Dextrose in Water) has been prescribed to run IV at a rate of 500 mL/8 hrs. The IV should infuse at how many mL/hr?

53 . 20 mg of liquid Imuran (Azathioprine) has been prescribed po. How many mL should you administer if the Imuran is available in a strength labeled 5 mg in 1 mL?

54 . 165 mg of Aminophylline must be prepared. How many mL should be prepared using a 10 mL ampule labeled 25 mg in 1 mL?

55 . An IV will be administered using an infusion pump that delivers mL/hr. 0.9% NaCl (0.9% Sodium Chloride) has been prescribed to run IV at a rate of 30 mL/30 min. The IV should infuse at how many mL/hr?

56 . 750 mg of Capastat Sulfate (Capreomycin Sulfate) must be prepared. How many mL should be prepared using a 10 mL ampule labeled 100 mg in 1 mL?

57 . An IV will be administered using an infusion pump that delivers mL/hr. D5 in 0.9% NaCl (5% Dextrose in 0.9% Sodium Chloride) has been prescribed to run IV at a rate of 11 mL/30 min. The IV should infuse at how many mL/hr?

58 . An IV will be administered using an infusion pump that delivers mL/hr. D5 in Lactated Ringer's (5% Dextrose in Lactated Ringer's Solution) has been prescribed to run IV at a rate of 130 mL/4 hrs. The IV should infuse at how many mL/hr?

59 . A child weighs 28 lbs, 2 oz. You determine that 28 lbs, 2 oz is equivalent to ___ kg.

60 . An IV will be administered using an infusion pump that delivers mL/hr. 0.9% NaCl (0.9% Sodium Chloride) has been prescribed to run IV at a rate of 1,000 mL/24 hrs. The IV should infuse at how many mL/hr?

61 . You have available an IV administration set that delivers 15 gtts/mL. D2.5W (2.5% Dextrose in Water) has been prescribed to run IV at a rate of 1,000 mL/6 hrs. The IV should infuse at how many gtts/min?

62 . You have available an IV administration set that delivers 15 gtts/mL. D5 in 0.45% NaCl (5% Dextrose in 0.45% Sodium Chloride) has been prescribed to run IV at a rate of 300 mL/1 hr. The IV should infuse at how many gtts/min?

63 . You have available an IV administration set that delivers 15 gtts/mL. Lactated Ringer's (Lactated Ringer's Solution) has been prescribed to run IV at a rate of 1,000 mL/10 hrs. The IV should infuse at how many gtts/min?

64 . 1,000 mL of D5W (5% Dextrose in Water) has been prescribed for IV infusion over 24 hrs. You are using an IV administration set that delivers 60 gtts/mL. You run the IV at ___ gtts/min.

Answer Key

1. 12
2. 1,000
3. 119
4. 750
5. 10
6. 25,000
7. 40
8. 83
9. 480
10. 63
11. 0.3
12. 70
13. 2.4
14. 125
15. 9.8
16. 60
17. 0.5
18. 0.4
19. 0.5
20. 400
21. 38
22. 12.6
23. 3,720
24. 933; 1,865
25. 2,820
26. 0.6
27. 17
28. 500
29. 30
30. 106
31. 83
32. 15
33. 6
34. 24
35. 100; 150
36. 15
37. 13.5
38. 5.5
39. 0.05
40. 75

Answer Key

41 . 23
42 . 4
43 . 10.2
44 . 373; 746
45 . 0.5
46 . 0.5
47 . 4.4
48 . 9.4
49 . 100
50 . 5
51 . 60
52 . 63
53 . 4
54 . 6.6
55 . 60
56 . 7.5
57 . 22
58 . 33
59 . 12.8
60 . 42
61 . 42
62 . 75
63 . 25
64 . 42