Practice Math Quiz

First semester instructors (Nursing 117) will review the math skills during the first three weeks of class. Third Semester students (Nursing 217-including LVNs), however, are tested on these skills the first day of class.

1. \( \text{gr} \frac{1}{4} = \) __________ \( \text{mg} \)
2. \( \text{gr} \frac{1}{200} = \) __________ \( \text{mg} \)
3. 45 lbs = __________ \( \text{kg} \)
4. 20 kg = __________ \( \text{lb} \)
5. 0.25g = __________ \( \text{mg} \)
6. 0.5mg = __________ \( \text{mcg} \)
7. gr ii = __________ \( \text{mg} \)
8. 8 oz = __________ \( \text{mL} \)
9. 400 mcg = __________ \( \text{mg} \)
10. 1000 mg = __________ \( \text{g} \)

11. The physician orders atropine gr \( \frac{1}{200} \) IM. You have a drug labeled atropine 0.4 mg/mL. How many mL will you administer?

12. The physician orders Levothroid (levothyroxine) 0.1 mg po. You have a drug labeled 100 mcg/tab. How many tabs will you administer?

13. The physician orders chloral hydrate 0.5mg po HS prn for sleep. You have a drug labeled 500 mcg per 10 mL. How many mL will you administer?

14. The physician orders Lanoxin (digoxin) 0.375 mg IV now. You have a drug labeled 500 mcg in 2 mL. How many mL will you administer?

15. The physician orders morphine sulfate gr \( \frac{1}{4} \) po q4h prn pain. You have a drug labeled morphine sulphate15 mg per tab. How many tablets will you administer?
16. The physician orders 1000 mL of D$_5$W over 8 hours. The drop factor is 12 gtts/mL.
   a. The IV is infused by gravity. Calculate the flow rate.

   b. The IV is infused by pump. Calculate the flow rate.

17. The physician orders 500 mL NS over 8 hours. The drop factor is 15 gtts/mL.
   a. The IV is infused by gravity. Calculate the flow rate.

   b. The IV is infused by pump. Calculate the flow rate.

18. The physician orders 2500 mL of D$_5$0.45NS over 24 hours. The drop factor is 15 gtts.
   a. The IV is infused by gravity. Calculate the flow rate.

   b. The IV is infused by pump. Calculate the flow rate.

19. The physician orders Vancocin 1 g in 150 mL of D$_5$W over 1.5 hours. The drop factor is 60 gtts.
   a. The IV is infused by gravity. Calculate the flow rate.

   b. The IV is infused by pump. Calculate the flow rate.

20. The physician orders Albumisol 25% in a 50mL vial over 30 minutes. The drop factor is 10 gtts/mL.
   a. The IV is infused by gravity. Calculate the flow rate.

   b. The IV is infused by pump. Calculate the flow rate.

Answers: (1) 15 mg (2) 0.3 mg (3) 20.5 kg (4) 44 lbs (5) 250 mg (6) 500 mcg (7) 120 mg (8) 240 mL
(9) 0.4mg (10) 1g (11) 0.75 mL (12) 1 tab (13) 10mL (14) 1.5mL (15) 1 tab (16) a. 25 b. 125 (17) a. 16 b. 63 (18) a.
26 b. 104 (19) a. 100 b. 100 (20) a. 17 b. 100