1. Convert 0.0004070 grams to micrograms.

0.0004070 grams = 0.0004070 x 1000 = 0.4070 mg = 0.4070 x 1000 = 407 mcg

1. Convert 224.5 micrograms to milligrams.

224.5 mcg = 224.5 / 1000 = 0.2245 mg

1. Convert 41.20 milligrams to grams.

41.20 mg = 41.20 / 1000 = 0.04120 grams

1. Convert 0.0075 grams to milligrams.

0.0075 grams = 0.0075 x 1000 = 7.5 mg

1. A patient is prescribed 100mg penicillin. How many 50mg tablets should be given?

100/50 = 10/5 = 2/1 = 2 tablets

1. You need to give 2 grams of X. How many 400mg tablets should be given?

2 grams = 2000 mg. 2000/400 = 20/4 = 5/1 = 5 tablets

1. 1.25g of X is to be given per day. Capsules are 75mg.  How many capsules should be given at each dose?

1.25 grams = 1.25 x 1000 = 1250 mg. 1250 / 75 = 250 / 15 = 50 / 3 = 16.67 = 17 capsules.

1. If X is supplied at 35 micrograms per 1mL and the patient is prescribed 475 micrograms, what volume of X should be given?

(475/35) x (1/1) = 475/35 = 95 / 7 = 13.57 mL

1. Syrup contains X 2mg/5ml.  How many mg of X are there in 25mL?  
     
   25 / 5 = 5x 5 x 2mg = 10 mg
2. 30mg of X is prescribed.  It is available as 5mg in 2mL.  What volume should be administered?  
     
   (30/5) x (2/1) = 60/5 = 12/1 = 12 mL
3. A patient is prescribed 2.6g of X.  If the syrup contains 200 micrograms/mL, what volume should be administered?

2.6 gram = 2600 mg = 2600000 mcg. (2600000/200) x (1/1) = 2600000/200 = 26000/2 = 13000 mL

1. A patient is prescribed 20mg of X for injection.  If the drug is available as 3mg per 1mL, what volume should be administered?

(20/3) x (1/1) = 20/3 = 6.67 mL

1. A patient is prescribed 700 microgram of X.  Ward stock contains 40mg/mL.  How much will you administer?

40 mg = 40000 mcg. (700/40000) x (1/1) = 7/400 = 0.0175 mL

1. A patient is prescribed X with 10.7 mg/kg.  The patient weighs 61.4kg.  What dose is required for this patient?

10.7 x 61.4 = 656.98 mg

1. 250 microgram of X is prescribed.  It is available as 0.5 mg per mL.  What volume should be administered?  
     
   0.5 mg = 500 mcg (250/500) x (1/1) = 250/500 = 25/50 = 5/10 = ½ = 0.5mL
2. X is available as 8000 units in 4mL and the patient requires 18000 units.  What volume is required?

(18000/8000) x (4/1) = 72000/8000 = 72/8 = 9/1 = 9mL

1. A patient is to receive 175mL of X over 3 hours.  Calculate the rate in mL/hour.

175 / 3 = 58.33 mL/hour

1. A patient is to receive 1 unit of X over 4 hours and the giving set delivers 10 drops/mL.  If 1 unit contains 500mL, calculate the drip rate.

(10 x 500) / (4 x 60) = 5000 / 240 = 500/24 = 250/12 = 125/6 = 20.83 = 21 drops/minute

1. 1500mL of X is to be given over 4 hours.  Calculate the drip rate if the giving set delivers  25 drops/mL.

(1500 x 25) / (4 x 60) = 37500/240 = 3750/24 = 1875/12 = 625/4 = 156.25 = 156 drops/minute

1. 560mL is to be infused over 2 hours. If the giving set delivers 30 drops per mL, calculate the drip rate.

(560 x 30) / (2x60) = 16800 / 120 = 1680 / 12 = 840 / 6 = 140 / 1 = 140 drops/minute

1. A patient is to receive 1000mL of X at a rate of 125mL per hour commencing at 9am. What time should it finish?

1000/125= 8 hours duration. 09.00 + 08.00 = 17.00 = 05.00pm