# Math Study Strategies

## Math for Nursing
## Combined Medication

The nurse needs to give the following medication:

**Demerol 75mg**
**Vistaril 50mg**

On hand there is an ampule of Demerol, 50mg per cc and a vial of Vistaril, 100mg per 2cc. What is the total cc's of medication the nurse will give?

Because the answer needs to be expressed in cc, start with cc in the numerator, multiply the prescribed medication with the medication on hand.

For demerol $\frac{1cc}{50\cancel{mg}} \times \frac{75\cancel{mg}}{dose} = \frac{75}{50} = 1.5\ cc$ for one dose

To find the amount for vistaril use the same dimensional analysis

Because on hand is 100 mg per 2 cc, start with cc in the numerator and set the product of ratios

$$\frac{2\cancel{cc}}{100\cancel{mg}} \times \frac{50\cancel{mg}}{1\cancel{cc}} = \frac{100}{100} = 1\ cc$$ vistaril for one dose

*Therefore 1.0 cc demerol + 1 cc vistaril will be* **2.5 cc of medication**