



Valley Grande Institute

Official Rounding Policy



*"The determination of how many places to carry your division when calculating dosages is based on the equipment being used. Some syringes are marked in tenths and some in hundredths. As you become familiar with the equipment used in dosage calculation, you will learn how far to carry your division and when to round off. To ensure accuracy, most calculation problems require that you carry your division at least **two decimal places (hundredths place)** and **round off to the nearest tenth**" (Gray Morris, 2014, p. 37).*

- **Round only at the end of the problem for the final answer.**
- **Follow the directions of each problem**
 - (i.e.: Round to the tenths place, or to the nearest hundredths place per instructions in the problem.)
- **Oral & Parenteral Medications**
 - Perform calculations to the hundredths place and round to the tenths place as needed.
- **IV Medications**
 - Perform calculations to the tenths place and round to a whole number
- **Pediatric dosages:**
 - Perform calculations and round to the hundredths place as applicable & administer using a TB syringe

Rounding Rules:

- Round to the tenths place - If the number in hundredths place is 5 or greater, increase the number to the left (tenths place) by 1.
 - i.e.: $(7.4\underline{6} = 7.5)$ or $(1.96 = 2)$
- Round to the hundredths place – If the number in the thousandths place is 5 or greater, increase the number to the left (hundredths place) by 1.
 - i.e.: $(3.23\underline{8} = 3.24)$
- If directions say "round to the tenths place" then the answer should have a number in the tenths place.
 - i.e.: $(5.73 = 5.\underline{7})$ or $(3.38 = 3.\underline{4})$
- If directions say "round to the hundredths place" then the answer must have a number in the tenths and hundredths place.
 - i.e.: $(1.637 = 1.\underline{64})$ or $(2.249 = 2.\underline{25})$

Miscellaneous Rules:

- Unscored Tablets – answers must be written as whole numbers
- Scored Tablets - answers may be written as:
 - whole numbers - i.e.: (2)
 - a half - i.e.: ($\frac{1}{2}$) or (0.5)
 - or a mixture - i.e.: ($3\frac{1}{2}$) or (3.5)
- IV medications:
 - Round to a whole number
 - Gravity - answers are written in whole numbers [drops] i.e.: (30 gtt/minute)
 - ❖ For Gravity problems, rounded up to next whole number
 - ❖ (i.e.: $12.49 \text{ gtt/min} = 12 \text{ gtt/min}$)
 - Pump - answers are written in whole numbers i.e.: (200 ml/hr) or (50 ml/hr)

Reference:

Gray Morris, D. (2018). *Calculate with Confidence*, 7th Ed. Elsevier Mosby, St. Louis, Missouri.

REVISED - 5/2022