

## Tips for Drug Calculations

- Always convert everything to the same units before solving the calculation.
- Complete work from left to right.
- Follow the 'one unit' or by proportion rule: what you do to one side of an equation, do the same to the other side.
- Write out the calculation clearly.
- Write down every step. Do not take short cuts; you are more likely to make a mistake.
- If you are copying formulas from a reference source, double-check your work.
- Try not to depend on your calculator. Estimate your answer, then if you make a mistake on the calculator, you are more likely to know that an error has been made.
- If you are in doubt about a calculation, stop and get help.
- When administering intravenous (IV) infusions, you need to know: the flow rate, infusion time, and total volume.

### Use the following equations:

- ✓  $\text{flow rate (mL/hr)} = \text{total volume (mL)} \div \text{infusion time (hr)}$
- ✓  $\text{infusion time (hr)} = \text{total volume (mL)} \div \text{flow rate (mL/hr)}$
- ✓  $\text{total volume (mL)} = \text{flow rate (mL/hr)} \times \text{infusion time (hr)}$