

Case studies

These case studies each cover content from multiple Dosage Calculation modules and will be most beneficial after you've reviewed all the modules. For each case study, we've listed the modules with relevant applicable content

Diabetes Leukopenia Pediatric Asthma Acute MI Advanced Alzheimer's Disease Bipolar
Pediatric Ear Infection/Dehydration Preeclampsia AIDS



A nurse is converting a client's weight from pounds and ounces to kilograms. What is the client's weight in kilograms?

(Review the MAR, flow sheet, and medication label. Round the answer to the nearest hundredth.)

✓ 9.18



A nurse is calculating the dosage of ranitidine. Available is ranitidine syrup 15 mg/mL. How many milliliters should the nurse administer?

(Review the MAR, flow sheet, and medication label. Round the answer to the nearest tenth.)

✓ 1.3



A nurse is preparing to reconstitute amoxicillin. How much diluent should the nurse add to this medication?

(Review the MAR, flow sheet, and medication label. Round to a whole number.)

<p>Directions for mixing: Tap bottle until all powder floats freely. Add approximately 1/3 total amount of water reconstituted. (total=35 mL) shake vigorously to wet powder. Add remaining water, again shake vigorously.</p> <p>Each 5 mL (1 teaspoonful) will contain amoxicillin trihydrate equivalent to 400 mg anhydrous amoxicillin.</p> <p>Dosage: Administer every 12 hours. See accompanying prescribing information.</p> <p>Keep tightly closed.</p> <p>Shake well before using. Refrigeration preferable but not required.</p> <p>Discard suspension after 14 days.</p>	<p>Amoxicillin for Oral Suspension, USP</p> <p>400 mg/5 mL</p> <p>50 mL when reconstituted Rx only</p>	<p>Net contents: Equivalent to 4 g anhydrous amoxicillin.</p> <p>Store dry powder at 20° to 25°C (65 to 77° F). Excursions permitted to 15° to 30°C (59° to 86°F) (see USP Controlled Room Temperature).</p> <p>Batch:</p> <p>Expiry:</p>
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✓ 35



A nurse is calculating the dosage of amoxicillin. How many milliliters should the nurse administer?

(Review the MAR, flow sheet, and medication label. Round to the nearest tenth.)

<p>Directions for mixing: Tap bottle until all powder floats freely. Add approximately 1/3 total amount of water reconstituted. (total=35 mL) shake vigorously to wet powder. Add remaining water, again shake vigorously.</p> <p>Each 5 mL (1 teaspoonful) will contain amoxicillin trihydrate equivalent to 400 mg anhydrous amoxicillin.</p> <p>Dosage: Administer every 12 hours. See accompanying prescribing information.</p> <p>Keep tightly closed.</p> <p>Shake well before using. Refrigeration preferable but not required.</p> <p>Discard suspension after 14 days.</p>	<p>Amoxicillin for Oral Suspension, USP</p> <p>400 mg/5 mL</p> <p>50 mL when reconstituted Rx only</p>	<p>Net contents: Equivalent to 4 g anhydrous amoxicillin.</p> <p>Store dry powder at 20° to 25°C (65 to 77° F). Excursions permitted to 15° to 30°C (59° to 86°F) (see USP Controlled Room Temperature).</p> <p>Batch:</p> <p>Expiry:</p>
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✓ 1.6



A nurse is calculating a client's daily maintenance fluid requirement. What is the daily maintenance fluid requirement for the client?

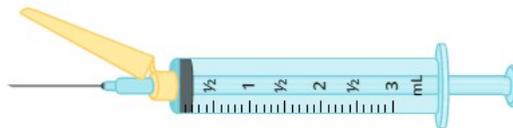
(Review the MAR, flow sheet, and medication label. Round the answer to the nearest whole number.)

✓ 918

INFANTS
PAIN RELIEF
SUSPENSION DROPS

FEVER REDUCER
PAIN RELIEVER
ACETAMINOPHEN

1 FL OZ (30 mL)
80 mg per 0.8 mL



✓ 1.2



A nurse is calculating the fluid bolus prescribed for a client. The nurse should set the IV pump to deliver how many mL/hr?

(Review the MAR, flow sheet, and medication label. Round the answer to the nearest whole number.)

63



A nurse is preparing to administer amoxicillin. The recommended dose of amoxicillin is 25 to 50 mg/kg/day. How does the prescribed amount compare to the recommended dosage range?

(Review the MAR, flow sheet, and medication label. Round to the nearest whole number.)

A Greater than the recommended dosage range

B Less than the recommended dosage range

C Within the recommended dosage range

D Unable to determine with information provided