

Dosage Calculation Modules case study : Pediatric Ear infection/dehydration

1.

Electronic Signature re/Name MD (6108) Date 5/11/XX

Q

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

First, determine the client's weight in pounds.

Step 1

What is the unit of measurement the nurse should calculate? (Place the unit of measure being calculated on the left side of the equation.)

X lb =

Step 2

2.

Q

A nurse is calculating the dosage of cimetidine. Available is cimetidine oral liquid 40 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

Step 1

What is the unit of measurement the nurse should calculate? (Place the unit of measure being calculated on the left side of the

3.

Studies

amoxicillin trihydrate equivalent to 400 mg anhydrous amoxicillin. [59° to 86°F] (see USP Controlled Room Temperature).

400 mg/5 mL

50 mL when reconstituted

Rx only

Batch: _____

Expiry: _____

Keep tightly closed.

Shake well before using. Refrigeration preferable but not required.

Discard suspension after 14 days.

35

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.

Each 5 mL (1 teaspoonful) will contain amoxicillin trihydrate equivalent to 400 mg anhydrous amoxicillin.

Net contents: Equivalent to 4 g anhydrous amoxicillin.

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).

Amoxicillin
for Oral Suspension, USP

400 mg/5 mL

50 mL when reconstituted

Rx only

Batch: _____

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Discard suspension after 14 days.

4.

Q

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

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1.6

5.

STUDIES

amoxicillin 1.6 mL PO every 12 hr.



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

Step 1

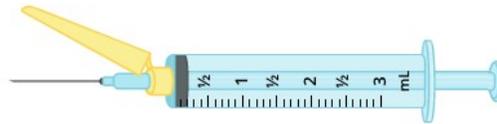
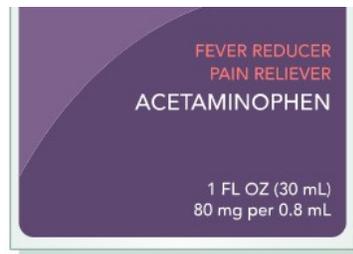
What is the formula?

$$X = (100 \times 10) + (50 \times 10) + (20 \times \underline{\quad})$$

Step 2

What is the client's weight? (Convert to kg if needed.)

6.



✓ 1.2

7.



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

Step 1