

Nursing Drug dosage Calculations examples and explanation

1. Order: Ampicillin 500 mg po q4h

Available: Ampicillin 250 mg capsules

How many capsules will the client take per dose?

$$x = \frac{\text{Desired dose}}{\text{Stock on Hand}} \times \text{Quantity or Volume}$$

$$x = 500\text{mg} / 250\text{mg} \times 1 \text{ Capsule}$$

$$x = 2 \times 1 \text{ Capsule}$$

$$x = 2 \text{ Capsules}$$

The Client will receive 2 capsules every 4 hours

2. The prescriber ordered acetaminophen 650 mg po every 6 hours as needed for a temperature greater than 38°C. The pharmacy has acetaminophen suspension with a concentration of 325 mg per tablespoon. If the client's temperature is 101°F, then how many mL will the client take at this time?

Convert: Farenheit to Celcius

To convert temperatures in degrees Fahrenheit to Celsius, **subtract 32 and multiply by .5556 (or 5/9).**

$$(101^{\circ}\text{F} - 32) \times 5/9 = 38.333^{\circ}\text{C}$$

Convert: 1 tablespoon to mL

Let us use 15mL as the standard

United States tablespoon is approximately 14.8 ml (0.50 US fl oz), a United Kingdom and Canadian tablespoon is exactly 15 ml (0.51 US fl oz), and an Australian tablespoon is 20 ml (0.68 US fl oz).