

Name: \_\_\_\_\_

# SICK DAY

1. Dr. Sloan orders a 750 mg of Amoxicillin to be taken by a 14.2 lb. child every 2 hours. The medication label shows that 75-150 mg/kg per day is the appropriate dosage range. Is Dr. Shepard's order within the desired range? (The conversion from kg to lbs. is 1kg/2.2lbs.)

a. What is the minimum dosage? 484.09

$$75 \times \frac{1}{2.2} \times 14.2 = 484.09$$

b. What is the maximum dosage? 968.18

$$150 \times \frac{1}{2.2} \times 14.2 = 968.18$$

c. How much Amoxicillin is the child taking each day? 9000

$$750 \times 12 = 9000$$

d. Is Dr. Sloan's order within the desired range? NO

2. Dr. Yang orders a 750 mg of Amoxicillin to be taken by a 24.2 lb. child every 4 hours. The medication label shows that 75-150 mg/kg per day is the appropriate dosage range. Is Dr. Shepard's order within the desired range? (The conversion from kg to lbs. is 1kg/2.2lbs.)

a. What is the minimum dosage? 825

$$75 \times \frac{1}{2.2} \times 24.2 = 825$$

b. What is the maximum dosage? 1650

$$150 \times \frac{1}{2.2} \times 24.2 = 1650$$

c. How much Amoxicillin is the child taking each day? 4500

$$750 \times 6 = 4500$$

d. Is Dr. Yang's order within the desired range? NO

3. Dr. Shepard orders a 250 mg of Amoxicillin to be taken by a 64.2 lb. child every 8 hours. The medication label shows that 125-275 mg/kg per day is the appropriate dosage range. Is Dr. Shepard's order within the desired range? (The conversion from kg to lbs. is 1kg/2.2lbs.)

a. What is the minimum dosage? 364.77

$$125 \times \frac{1}{2.2} \times 64.2 = 364.77$$

b. What is the maximum dosage? 802.5

$$275 \times \frac{1}{2.2} \times 64.2 = 802.5$$

c. How much Amoxicillin is the child taking each day? 750

$$250 \times 3 = 750$$

d. Is Dr. Shepard's order within the desired range? yes

4. Dr. Grey orders a 350 mg of Amoxicillin to be taken by an 84.2 lb. child every 6 hours. The medication label shows that 75-120 mg/kg per day is the appropriate dosage range. Is Dr. Grey's order within the desired range? (The conversion from kg to lbs. is 1kg/2.2lbs.)

a. What is the minimum dosage? 2870.45

$$75 \times \frac{1}{2.2} \times 84.2 = 2870.45$$

b. What is the maximum dosage? 4592.73

$$120 \times \frac{1}{2.2} \times 84.2 = 4592.73$$

c. How much Amoxicillin is the child taking each day? 1400

$$350 \times 4 = 1400$$

d. Is Dr. Grey's order within the desired range? NO