

ANSWERS

1

Convert lb to kg: $29 \text{ lb} \div 2.2 = 13.2 \text{ kg}$

Calculate recommended dose: $13.2 \text{ kg} \times 20 \text{ mg/kg/day} = 264 \text{ mg/day}$

Calculate the volume of medication:

$$\frac{D}{H} \times Q = \frac{264 \text{ mg}}{10 \text{ mg}} \times 1 \text{ mL} = 26.4 \text{ mL/day}$$

Divided twice a day: $26.4 \div 2 = 13.2 \text{ mL}$

FINAL ANSWER: 13.2 mL

2

No conversion needed

Calculate recommended dose: $25 \text{ kg} \times 10 \text{ mg/kg} = 250 \text{ mg}$

Calculate the volume of medication:

$$\frac{D}{H} \times Q = \frac{250 \text{ mg}}{125 \text{ mg}} \times 1 \text{ mL} = 2 \text{ mL}$$

FINAL ANSWER: 2 mL

3

Convert lb to kg: $64 \text{ lb} \div 2.2 = 29.9 \text{ kg} = 29.1 \text{ kg}$

Calculate recommended minimum dose: $29.1 \text{ kg} \times 10 \text{ mg/kg/day} = 291 \text{ mg/day}$

Calculate recommended maximum dose: $29.1 \text{ kg} \times 15 \text{ mg/kg/day} = 436.5 \text{ mg/day}$

Is the dosage order safe? The ordered dosage is **SAFE**. Child will received 300 mg in a 24-hour period in divided doses of 150 mg BID.

$$\frac{D}{H} \times Q = \frac{150 \text{ mg}}{50 \text{ mg}} \times 1 \text{ mL} = 3 \text{ mL}$$

FINAL ANSWER: 3 mL



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4

Convert lb to kg: $22 \text{ lb} \div 2.2 = 10 \text{ kg}$

Calculate recommended dose: $10 \text{ kg} \times 100 \text{ mg/kg/day} = 400 \text{ mg/day}$

Calculate the volume of medication:

$$\frac{D}{H} \times Q = \frac{400 \text{ mg}}{400 \text{ mg}} \times 5 \text{ mL} = 5 \text{ mL/day}$$

Divided twice a day: $5 \text{ mL} \div 2 = 2.5 \text{ mL}$

FINAL ANSWER:

2.5 mL

5

No conversion needed

Calculate recommended dose: $18 \text{ kg} \times 10 \text{ mg/kg} = 1800 \text{ mg}$

Calculate the volume of medication:

$$\frac{D}{H} \times Q = \frac{1800 \text{ mg}}{40 \text{ mg}} \times 1 \text{ mL} = 45 \text{ mL}$$

FINAL ANSWER:

45 mL

6

No conversion needed

Calculate recommended dose: $3 \text{ kg} \times 4 \text{ mg/kg} = 12 \text{ mg}$

Calculate the volume of medication:

Divided twice a day: $12 \text{ mg} \div 2 = 6 \text{ mg}$

FINAL ANSWER:

6 mg

