

33) Yes; the usual dosage is 40 mg/kg/day divided into 3 doses q.8h, which is equivalent to 240 mg per dose for a 40 lb (approx. 18 kg) child.

34) 3; dosage is safe 35) 103.3 36) 282; 423 37) 9.4 38) 250–375; Yes 39) 1.7; 26 40) 880 41) 25 42) 1 43) 5; 5 44) 50

45) 0030; 12:30 AM the next day 46) 10 47) 100; 1 48) 5

49) $\frac{1}{30}/XX, 1500, \text{reconstituted}$
as 100 mg/mL. Expires
 $\frac{1}{31}/XX, 1500. G.D.P.$

50) **Prevention:** The importance of checking a medication label at least three times to verify supply dosage cannot be overemphasized. It is also important NEVER to assume that the supply dosage is the same as a supply dosage used to calculate previously. Always read the label carefully. Writing the calculation down will also help improve accuracy.

Solutions—Essential Skills Evaluation: Pretest and Posttest

$$1) \frac{80 \text{ mg}}{1 \text{ tab}} \times \frac{40 \text{ mg}}{X \text{ tab}}$$

$$80X = 40$$

$$\frac{80X}{80} = \frac{40}{80}$$

$$X = \frac{1}{2} \text{ tablet}$$

$$2) \frac{0.5 \text{ mg}}{1 \text{ tab}} \times \frac{1.5 \text{ mg}}{X \text{ tab}}$$

$$0.5X = 1.5$$

$$\frac{0.5X}{0.5} = \frac{1.5}{0.5}$$

$$X = 3 \text{ tablets}$$

3) Use 10 mg capsules; a 40 mg capsule cannot be split to provide the 20 mg dose.

$$\frac{10 \text{ mg}}{1 \text{ cap}} \times \frac{20 \text{ mg}}{X \text{ cap}}$$

$$10X = 20$$

$$\frac{10X}{10} = \frac{20}{10}$$

$$X = 2 \text{ capsules}$$

$$4) \frac{5 \text{ mg}}{1 \text{ tab}} \times \frac{2.5 \text{ mg}}{X \text{ tab}}$$

$$5X = 2.5$$

$$\frac{5X}{5} = \frac{2.5}{5}$$

$$X = 0.5 \text{ tablet} = \frac{1}{2} \text{ tablet}$$

$$7) \frac{25 \text{ mg}}{1 \text{ mL}} \times \frac{12.5 \text{ mg}}{X \text{ mL}}$$

$$25X = 12.5$$

$$\frac{25X}{25} = \frac{12.5}{25}$$

$$X = 0.5 \text{ mL}$$

$$8) \frac{50 \text{ mg}}{1 \text{ mL}} \times \frac{40 \text{ mg}}{X \text{ mL}}$$

$$50X = 40$$

$$\frac{50X}{50} = \frac{40}{50}$$

$$X = 0.8 \text{ mL}$$

$$9) \frac{10 \text{ mg}}{1 \text{ mL}} \times \frac{4 \text{ mg}}{X \text{ mL}}$$

$$10X = 4$$

$$\frac{10X}{10} = \frac{4}{10}$$

$$X = 0.4 \text{ mL}$$

$$10) \frac{2 \text{ mg}}{1 \text{ mL}} \times \frac{3 \text{ mg}}{X \text{ mL}}$$

$$2X = 3$$

$$\frac{2X}{2} = \frac{3}{2}$$

$$X = 1.5 \text{ mL}$$

$$11) \frac{500 \text{ mg}}{2 \text{ mL}} \times \frac{350 \text{ mg}}{X \text{ mL}}$$