



Dosage Calculation - Practice Exercise Answers

Answer 1

Stock required: 120 mg

Stock strength: 550 mg/12ml

Volume of stock: 12 mls

$$\text{So, Dosage} = \frac{120 \text{ mg}}{550 \text{ mg}} \times 12 \text{ mls}$$

$$= 2.61 \text{ mls.}$$

Answer 2

Stock required (SR): 25 mg

Stock strength (SS): 0.6g/8ml

Volume of stock: 8 ml

Converting the SS amount to mg.

So, SS= 0.6g= 0.6 × 1000 = 600 mg

$$\text{Dosage} = \frac{25 \text{ mg}}{600 \text{ mg}} \times 8 \text{ ml}$$

$$= 0.33 \text{ ml}$$

Answer 3

Stock required: 600/2= 300 mg/dose

Stock strength: 150 mg



$$\begin{aligned} \text{So, tablet dosage} &= \frac{300 \text{ mg}}{150 \text{ mg}} \\ &= \mathbf{2 \text{ tablets}} \end{aligned}$$

Answer 4

Stock required: 72.5 mg/day;

$$\text{SR per dose} = \left(\frac{72.5}{3}\right) \text{mg/dose} = 24.17 \text{ mg/dose}$$

Stock strength: 50 mg

Volume: 10 ml

$$\text{Dose} = \left(\frac{\text{Stock required}}{\text{Stock strength}} \times \text{volume}\right)$$

$$\text{Dose} = \left(\frac{24.17}{50} \times 10\right) \text{ mls} = \mathbf{4.834 \text{ mls}}$$

$$\text{Total volume in a day} = (4.834 \times 3) \text{ mls} = \mathbf{14.502 \text{ mls}}$$

Answer 5

SR = 25mg/kg/day

The dose is to be given every 8 hours, that is, three times a day.

$$\text{So, SR per dose} = \left(\frac{25}{3}\right) \text{mg/kg/dose} = \mathbf{8.33 \text{ mg/kg/dose}}$$

SS = 0.05g/10ml

Converting the SS amount to mg.

$$\text{So, SS} = 0.05\text{g} = (0.05 \times 1000) \text{ mg} = 50\text{mg}$$

Child's weight = 22kg

$$\text{Dose} = \left(\frac{\text{Stock required}}{\text{Stock strength}} \times \text{volume}\right) \times \text{Weight}$$

$$\text{Dose} = \frac{8.33}{50} \times 10 \times 22 = \mathbf{36.65\text{mls}}$$

$$\text{Total dose/day} = (36.65 \times 3) \text{ mls} = \mathbf{109.96\text{mls.}}$$