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Chapter 4 · Self-Test 1

1. $\dfrac{1.5\,mg}{0.75\,mg} = 2$ tablets ▫

2. $\dfrac{0.25\,mg}{0.5\,mg} = 0.5$ tablet ▫

3. ~~one~~ capsules
$0.5 \times 1000 = \dfrac{500\,mg}{250\,mg} =$
2 ~~tablets~~ ▫

4. $\dfrac{10\,mg}{2.5\,mg} = 4$ tablets ▫

5. $\dfrac{650\,mg}{325\,mg} = 2$ tablets ▫

6. $\dfrac{20\,mg}{10\,mg} = 2$ capsules ▫

7. $\dfrac{10\,mg}{2.5\,mg} = 4$ tablets ▫

8. $\dfrac{200,000\,units}{400,000\,units} = 0.5$ tablet ▫

9. $\dfrac{0.5\,mg}{0.25\,mg} = 2$ tablets ▫

10. $\dfrac{18.75\,mg}{12.5\,mg} = 1.5$ tablets ▫

11. $\dfrac{300\,mg}{200\,mg} = 1.5$ tablets ▫

12. $\dfrac{0.3\,mg}{0.1\,mg} = 3$ tablets ▫

13. $\dfrac{6.25\,mg}{25\,mg} = 0.25$ tablet ▫

14. $400/1000 = 0.4\,mg$
$\dfrac{0.4\,mg}{0.2\,mg} = 2$ tablets ▫

15. $\dfrac{7.5\,mg}{5\,mg} = 1.5$ tablets ▫

16. $\dfrac{0.625\,mg}{1.25\,mg} = 0.5$ tablet ▫

17. $0.5 \times 1000 = 500$
$\dfrac{500\,mg}{250\,mg} = 2$ tablets ▫

18. $\dfrac{37.5\,mg}{25\,mg} = 1.5$ tablet ▫

19. $1 \times 1000 = 1000\,mg$
$\dfrac{1000\,mg}{500\,mg} = 2$ capsules ▫

20. $\dfrac{25\,mg}{10\,mg} = 2.5$ tablet ▫

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Chapter 5: Proficiency Test 2

1. $0.1 \times 1000 = 100mg$

$$100mg \times \frac{3mL}{200mg} = 1.5mL_\square$$

2. $5mg \times \frac{1mL}{15mg} = 0.\overline{3} = 0.33mL_\square$

3. $25mg \times \frac{2mL}{50mg} = 1mL_\square$

4. 20 units$_\square$

5. $20 \, m/kg \times \frac{10mL}{40m/kg} = 5mL_\square$

6. $0.6mg \times \frac{1mL}{0.4mg} = 1.5mL_\square$

7. $0.8mg \times \frac{1mL}{0.4mg} = 2mL_\square$

8. $0.25 \times 1000 = 250mg$

$$250mg \times \frac{1mL}{250mg} = 1mL_\square$$

9. $200mg \times \frac{2mL}{500mg} = 0.8mL_\square$

10. $1:100 = 1g/100mL \Rightarrow 1000mg/100mL$

$$7.5mg \times \frac{100mL}{1000mg} = 0.75mL_\square$$

11. $10mg \times \frac{1mL}{5mg} = 2mL_\square$

12. $25mg \times \frac{2mL}{100mg} = 0.5mL_\square$

13. $50mg \times \frac{1mL}{25mg} = 2mL_\square$

14. $0.5mg \times \frac{1mL}{1mg} = 0.5mL_\square$

15. $0.2 \times 1000 = 200mg$

$$200mg \times \frac{2mL}{200mg} = 2mL_\square$$

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Chapter 8. Self-Test 2

1. $2016/2.2 = 9.0907 \times 20mg = 181.8\overline{1} \approx 181.8mg$ per day   — Low is
$2016/2.2 = 9.0905 \times 40mg = 363.63 \approx 363.6mg$ /day — high is   safe
not

$60mg \times \dfrac{5mL}{125mg} = 2.4mL$

2. $2916/2.2 = 13.18\overline{18} \times 40 = 527.2\overline{7}/3 \approx 175$

$175mg \times \dfrac{5mL}{125mg} = 7mL$

3. $200mg \times \dfrac{5mL}{125mg} = 8mL$

4. $80mg \times 4 = 320mg$

5. $1mg \times \dfrac{1mL}{5mg} = 0.2mL$

6. low → $0.05mg \times 14kg = 0.7mg$ ⎤ safe $2mg \times \dfrac{1mL}{2mg} = 1mL$
   high → $0.2mg \times 14kg = 2.8mg$ ⎦

7. low → $0.1mg \times 30kg = 3mg$ ⎤ $5mg$ $5mg \times \dfrac{5mL}{5mg} = 5mL$
   high → $0.2mg \times 30kg = 6mg$ ⎦ safe

8. $48 \div 2.2 = 21.82 kg$ $0.5g → 500mg$
low → $100mg \times 21.82 = \dfrac{2182mg}{4}$ high → $200mg \times 21.82 = \dfrac{4364}{4}$ $= 1091$ per dose
                     545.5 per dose   (dose too low)

9. $10mg \times 30kg = 300mg$ $300mg \times \dfrac{5mL}{100mg} = 15mL$

10. 12 lb 8oz $\dfrac{8}{16} = 0.5$ → $12.5 lb/2.2 = 5.68kg$
low → $4mg \times 5.68kg = 22.72mg$ $60mg$ 3x daily is too high
high → $8mg \times 5.68kg = 45.44mg$