Chapter 4

Brittney Burns

#1 $\dfrac{1.5}{0.75} \times 1 =$ 2 tablets

#2 $\dfrac{0.25}{0.5} \times 1 =$ 0.5 mg

#3 $0.5g \times 1000 = 500$

$\dfrac{500}{250} \times 1 =$ 2 capsules

#4 $\dfrac{10}{2.5} = 4$ 4 tablets

#5 $\dfrac{650mg}{325mg} =$ 2 tablets

#6 $\dfrac{20mg}{10mg} =$ 2 capsules

#7 $\dfrac{10mg}{2.5} =$ 4 tablets

#8 $\dfrac{200,000}{400,000} =$ 0.5 units

#9 $\dfrac{0.5}{0.25} =$ 2 tablets

#10 $\dfrac{18.75}{12.5} =$ 1.5 tablets

2. *Convert pounds to kilograms. Round to the neares*

$$79 \div 22 = 35.909$$

```
    35.909
22)79.0
   66
   13 0
   11 0
    2 00
    1 98
      200
      198
```

ld weighs 35.91 kg.

e the safe dose range in milligrams per kil
package insert states 0.05–0.2 mg/kg ever

High Dose

$$35.91 \text{ kg}$$
$$\times 0.2 \text{ mg}$$
$$\overline{7.182 \text{ mg}}$$

e is 1.8 mg.
l is safe.

Morphine (Fig. 8-9) comes 2 mg

Proportion
EXPRESSED AS TWO RATIOS
1 mL:2 mg :: x:1.8 mg
RESSED AS TWO FRACTIONS
$\dfrac{1 \text{ mL}}{2 \text{ mg}} \times \dfrac{x}{1.8 \text{ mg}}$
OLUTION FOR BOTH
PORTION METHODS
$1.8 = 2x$
$\dfrac{1.8}{2} = x$
$L = x$

on syringe for t

RE 8-9 Mc

#11 $\dfrac{300 \text{ mg}}{200 \text{ mg}} = 1.5 \text{ mg}$

#12 $\dfrac{0.3 \text{ mg}}{0.1 \text{ mg}} = 3 \text{ tablets}$

#13 $\dfrac{6.25 \text{ mg}}{25 \text{ mg}} = 0.25 \text{ tablets}$

#14 $400 \text{ mcg} / 1000 = 0.4 \text{ mg}$

$\dfrac{0.4}{0.2} = 2 \text{ tablets}$

#15 $\dfrac{7.5 \text{ mg}}{5 \text{ mg}} = 1.5 \text{ tablets}$

#16 $\dfrac{0.625 \text{ mg}}{1.25 \text{ mg}} = 0.5 \text{ tablets}$

#17 $0.5 \text{ g} \times 1000 = 500$

$\dfrac{500}{250} = 2 \text{ tablets}$

#18 $\dfrac{37.5 \text{ mg}}{25 \text{ mg}} = 1.5 \text{ tablets}$

#19 1g × 1000 = 1000 mg

$$\frac{1000 \text{ mg}}{500 \text{ mg}} = 2 \text{ tablets}$$

#20 $\dfrac{25 \text{ mg}}{10 \text{ mg}} = 2.5 \text{ tablets}$

Chapter 5   Proficiency test #1

#1 $0.1g \times 1000 = 100\,mg$

     $\dfrac{100\,mg}{200\,mg} \times 3 = 1.5\,mL$

#2 $\dfrac{5\,mg}{15\,mg} \times 1 = 0.\overline{333}$

              LD 0.3

#3 $\dfrac{25\,mg}{50\,mg} \times 2 = 1\,mL$

#4   15 units + 5 units = 20 units

#5 $\dfrac{20\,mEq}{40\,mEq} \times 10 = 5\,mL$

#6 $\dfrac{0.6\,mg}{0.4\,mg} \times 1 = 1.5\,mL$

#7 $\dfrac{0.8\,mg}{0.4\,mg} \times 1 = 2\,mL$

#8 $0.25g \times 1000 = 250$

     $\dfrac{250}{250} \times 1 = 1\,mL$

#9 $\dfrac{200mg}{500mg} \times 2mL = 0.8mL$

#10 $\dfrac{7.5}{1000} = 0.75mL$

#11 $\dfrac{10mg}{5mg} \times 1 = 2mL$

#12 $\dfrac{25}{100} \times 2 = 0.5$

#13 $\dfrac{50mg}{25mg} = 2mL$

#14 $\dfrac{0.5mg}{1mg} \times 1 = 0.5mL$

#15 $0.2g \times 1000 = 200$

$\dfrac{200}{200} \times 2 = 2mL$

Chapter 8 Self test

#1 20/2.2 = 9.09   SAFE

Low $\nearrow$ $20^{x} 40$ $\longrightarrow$ High

$\underline{181.\overline{81}}$ 363.6

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

#2 29/2.2 = 13.18 = 13.2

13.2 × 40 = $\dfrac{527.\overline{27}}{125}$ × 5mL = 21.$\overline{09}$

                                            $\downarrow$
                                         21.1/3
                                         = 7.$\overline{63}$
                                         $\downarrow$
SAFE   (7)

#3 $\dfrac{200mg}{125mg}$ × 5mL = 8mL = SAFE

#4 80mg × 4 = 320

Not SAFE to low check w/ provider

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

$\times 3 = 0.6\,mL$

$\begin{array}{c} 0.2 \\ \times 4 \end{array} = 0.8\,mL$

Can give 1st dose Q3 but show ask the provider for clarification for 2nd

#6 $0.05\,mg \times 14\,kg = 0.7\,mg$

$0.2\,mg \times 14\,kg = 2.8\,mg$

SAFE

#7 $0.1\,mg \times 30\,kg = 3\,mg$

$0.2\,mg \times 30 = 6\,mg$?

SAFE

#8 $48/2.2 = 21.82$

SAFE dose → $0.5g \times 1000 = 500\,mg$

Not SAFE

$100 \times 21.82 = 2182/4 = 545.5$

$200 \times 21.82 = 4364/4 = 1091$

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

#10 $8/16 = 0.5 + 12 = 12.5$

$12.5/22 = 5.68$

22.72   45.44