

7.34) $2:3$
 $2(4):3(4)$
 $18:27$

7.35) $4:5$
 $4(12)=48$
 $4n+5n=108$
 $9n=108$
 $n=12$

7.36) $1:16$

$20:58$

$10:29$

7.37) $1n+5n=12$
 $n=2$

$5(2)=10 \text{ metros.}$

7.38)

$4:3$

$3n=87$
 $n=29$

$87+4(29)=87+116$
 $=203$

7.39)

$3n:5n$

$5n=3n+120$

$5n=300$

$2n=120$
 $n=60$

7.40)

$9a:2n$

$3n+2n=20$
 $n=4$

$\frac{12+a}{28-a} = \frac{2}{3}$

$12:8$

$12+a:8+(20-a)=2:3$

$36+3a=56-2a$
 $5a=20$
 $a=4$

7.41)

$\frac{5}{13} (26,000) = 10,000$

7.42)

$6:5 = x:25$

$x=30 \text{ metros}$

7.43)

$0.5:80 = \frac{47}{8}:x$

$\frac{1/2}{80} = \frac{47/8}{x}$ $x = \frac{47 \cdot 8 \cdot 2}{8}$

$x=940 \text{ millas}$

7.44)

Fortnight: days
 $1 \quad 14$

mile: Furlongs
 $1 \quad 8$

140 millas en un Fortnight.

$140(8)=1120 \text{ Furlongs.}$

7.45)

$1:5 = 5:x$

$1(5):5(5) = 5:25 \text{ inches}$

7.46)

$\frac{2}{9} \text{ mm} \times \frac{1 \text{ cm}}{10 \text{ mm}} = \frac{2}{45} \text{ cm}$

$\frac{2}{45}:1 \text{ km} = 10:x$

$\frac{2/45}{1} = \frac{10}{x}$

$x = \frac{10 \cdot 45}{2} = 225 \text{ Km}$

7.47)

Distancia total ≈ 360 millas.

$$\text{Tiempo total} \approx 120 \left(\frac{1}{60} \right) + 120 \left(\frac{1}{40} \right) + 120 \left(\frac{1}{24} \right) = 120 \left(\frac{10}{120} \right) = 10 \text{ horas}$$

$$\frac{360 \text{ millas}}{10 \text{ horas}} = 36 \text{ mph}$$

7.48)

$$A = 8 : 1$$

$$B = 6 : 1$$

 $x = \text{galones}$

$$6x = 30 (b)$$

$$6x = 240$$

$$x = 40 \text{ galones}$$

7.49)

$$80 \text{ y} : 1 \text{ milla}$$

$$\frac{1 \text{ milla}}{80 \text{ y}} \times \frac{3600 \text{ y}}{1 \text{ hour}} = 45 \frac{\text{millas}}{\text{hora}}$$

7.50)

$$\bullet \frac{10 \text{ laps}}{25 \text{ min}} = \frac{2 \text{ laps}}{5 \text{ min}} = \frac{1 \text{ lap}}{2.5 \text{ min.}} \quad \bullet \frac{12 \text{ laps}}{24 \text{ min}} = \frac{1 \text{ lap}}{2 \text{ min.}}$$

Ha mejorado en $\frac{1}{2}$ minuto o 0.5 minutos.

7.51)

$$\frac{2}{\frac{1}{60} + \frac{1}{40}} = \frac{2}{\frac{4}{200} + \frac{5}{200}} = \frac{2}{\frac{9}{200}} = \frac{200 \cdot 2}{9} = \frac{400}{9} = 44 \frac{4}{9} \text{ mph} = 44.\bar{4} \text{ mph} \approx 44.4 \text{ mph}$$

7.52)

$$295 - 25 = 270 \text{ millas fallan.}$$

$$50 + 40 = 90 \text{ mph}$$

$$270 \times \frac{1 \text{ hora}}{90 \text{ millas}} = 3 \text{ horas.}$$

$$3 + 0.5 = 3.5 \text{ horas.}$$

$$4:30 \text{ pm}$$

7.53)

$$12.5 \text{ g} : 1 \text{ day}$$

$$\frac{25 \left(\frac{15}{30} \right)}{\frac{1}{1}} : 30$$

$$375 \text{ g} : 30 \text{ days}$$

$$\frac{125}{10} =$$

$$1000 - 375 = 625 \text{ galones.}$$

7.54)

$$A = 72 \text{ min}$$

$$72 + 36 + 12 = 120 \text{ minutos.}$$

$$B = 36 \text{ min}$$

$$C = 12 \text{ min}$$

7.55)

$$J = \frac{1}{75 \text{ min}}$$

$$\frac{1}{75} + ? = \frac{1}{30 \text{ min}}$$

So minutos.

$$\frac{1}{30} - \frac{1}{75} = \frac{5}{150} - \frac{2}{150} = \frac{3}{150} = \frac{1}{50}$$

7.56)

$$2000 \text{ pounds} \times \frac{1 \text{ dolar}}{0.62 \text{ pounds}} \times \frac{12.1 \text{ pesos}}{1 \text{ dolar}} = \frac{2000 \cdot 121/10}{62/100} \text{ pesos} = \frac{2000 \cdot 121 \cdot 100}{62 \cdot 10}$$

$$\begin{array}{r} 0.9032258... \\ 280 \overline{) 31} \\ \underline{279} \\ 100 \\ \underline{93} \\ 70 \\ \underline{62} \\ 80 \\ \underline{62} \\ 180 \\ \underline{155} \\ 250 \end{array}$$

$$= \frac{1210000}{31} = 3 \frac{28}{31} \cdot 10000$$

$$\approx (3,9032258) \cdot 10000$$

$$\approx 39032,25...$$

$$\approx 39032 \text{ pesos.}$$

7.57)

Cooks : Omelets : minutes

4 24 10

4 cooks hacen 24 omelets en 10 minutos.

1 cook hace 6 omelets en 10 minutos.

Para hacer 40 en 10 minutos se necesitan

10 cooks.