

## Compound Units Ex 22.15 Continued

8) 4 m of fabric costs £8.40

$$\text{Price per metre} = \frac{£8.40}{4} = £2.10$$

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9) Paid £478 per week for 40 hours

$$\text{Hourly rate} = \frac{£478}{40} = £11.95$$

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10) a) 20 litres in 8 s

$$= \frac{20}{8} = 2.5 \text{ litres/s}$$

b) 48 litres in 30 s

$$= \frac{48}{30} = 1.6 \text{ litres/s}$$

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11) Rate 2 litres/s for 10 min  
for  $10 \times 60 = 600$  s

$$\text{Vol} = 2 \times 600 = 1200 \text{ litres}$$

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12) 18 units used in 7.5 hrs

$$\text{a) Consumption} \frac{18}{7.5} = 2.4 \text{ units/hr}$$

b) in 24 hrs use  $2.4 \times 24$   
 $= 57.6$  units

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13) 8 litres for 100 km

a) 1 litre for  $\frac{100}{8} = 12.5$  km

40 litres for  $40 \times 12.5 = 500$  km

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b) 250 miles  $= 250 \times \frac{8}{5} = 400$  km

$400 \div 12.5 = 32$  litres

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c) 12.5 km/litre

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14) £50 = 75 \$

£1 =  $\frac{75}{50} = 1.50$  \$

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b) £125 =  $1.50 \times 125$  \$  
 $= 187.50$  \$

c) 120 \$ =  $\frac{120}{1.5} = £80$

# Detention Questions

Solve

$$\begin{aligned} 1) \quad 2x + 3y &= 13 \\ 5x + 6y &= 31 \end{aligned}$$

$$\begin{aligned} 4) \quad 5x + 2y &= 18 \\ 7x + 4y &= 30 \end{aligned}$$

$$\begin{aligned} 2) \quad 4x - 2y &= 12 \\ 5x - 4y &= 12 \end{aligned}$$

$$\begin{aligned} 5) \quad 3x + 10y &= 53 \\ 5x - 2y &= -5 \end{aligned}$$

$$\begin{aligned} 3) \quad 7x - 5y &= 6 \\ 3x + 5y &= 24 \end{aligned}$$