Solutions

Marking: **M1** a correct method, **A1** the correct answer.

Each answer shows the steps, then the **result**.

2.1

- 0.35×280

$$= \mathbf{98}$$

2.2

- $\dfrac{21}{60} \times 100$

$$= \mathbf{35}\%$$

2.3

- a rise of 6% gives a multiplier of 1.06, so 85×1.06

$$= \mathbf{90.1}$$

2.4

- the fall is $80 - 68 = 12$, and the denominator is the ORIGINAL, 80

$$\frac{12}{80} \times 100 = \mathbf{15}\%$$

2.5

- a 15% decrease leaves 85%, so multiply by 0.85

$$240 \times 0.85 = \mathbf{204}$$

3.1

(a)

- the sale price is 70% of the original, so the multiplier is 0.7
- original $= 84 \div 0.7$

$$= \$\mathbf{120}$$

(b)

- $120 - 84$

$$= \$\mathbf{36}$$

3.2

- the increase is $26\,215 - 24\,500 = 1715$

$$\frac{1715}{24\,500} \times 100 = \mathbf{7}\%$$

3.3

- interest each year $= 0.025 \times 3000 = \$75$; for 4 years $= 4 \times 75 = \$300$
- total $= 3000 + 300 = \$\mathbf{3300}$

3.4

- the new pay is 112% of the old, so old $= 504 \div 1.12$

$$= \$\mathbf{450}$$

3.5

(a)

- selling price $= 40 \times 1.35 = \$54$
- sale price $= 54 \times 0.8 = \$\mathbf{43.20}$

(b)

- profit $= 43.20 - 40 = \$3.20$
- percentage profit $= \dfrac{3.20}{40} \times 100\% = \mathbf{8}\%$