

ERRATA

MATHEMATICS FOR AUSTRALIA 11

General Mathematics

Worked Solutions

First edition - 2018

The following erratum was made on 25/May/2020

page 103 **EXERCISE 3F.3**, 5th line of question **4** should read:

$$\begin{aligned} \mathbf{4} \quad & \text{From the table, the monthly repayments on each \$1000 for 4 years at 6\% p.a.} = \$23.4850 \\ \therefore & \text{ repayments on \$10 000} = \$23.4850 \times 10 \quad \{10 \text{ lots of \$1000}\} \\ & = \$234.85 \end{aligned}$$

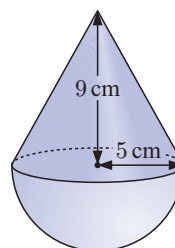
The repayments are \$234.90 per month. {next 10 cents}

$$\begin{aligned} \text{Total repayment} &= \text{monthly repayment} \times \text{number of months} \\ &= \$234.90 \times 48 \\ &= \$11\,275.20 \end{aligned}$$

The following errata were made on 14/Aug/2019

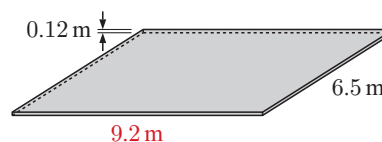
page 241 **EXERCISE 7E.2**, question **3 f** should read:

$$\begin{aligned} \mathbf{3} \quad \mathbf{f} \quad V &= \text{volume of hemisphere} + \text{volume of cone} \\ &= \frac{1}{2} \times \frac{4}{3} \pi r^3 + \frac{1}{3} (\text{area of base} \times \text{height}) \\ &= \frac{2}{3} \times \pi \times 5^3 + \frac{1}{3} \times \pi \times 5^2 \times 9 \text{ cm}^3 \\ &\approx 497 \text{ cm}^3 \end{aligned}$$



page 243 **EXERCISE 7E.2**, question **6 a** diagram should have correct label:

$$\begin{aligned} \mathbf{6} \quad \mathbf{a} \quad \text{Depth of floor} &= 120 \text{ mm} \\ &= 120 \div 10 \div 100 \text{ m} \\ &= 0.12 \text{ m} \\ \text{Volume of concrete} &= \text{length} \times \text{width} \times \text{depth} \\ &= 9.2 \times 6.5 \times 0.12 \text{ m}^3 \\ &= 7.176 \text{ m}^3 \end{aligned}$$



page 255 **REVIEW SET 7A**, question **13** should read:

$$\begin{aligned} \mathbf{13} \quad 15.4 \text{ mm} &= (15.4 \div 10 \div 100) \text{ m} \\ &= 0.0154 \text{ m} \end{aligned}$$

$$\begin{aligned} \text{Volume of water collected on roof} &= \text{area of roof} \times \text{rainfall level} \\ &= 12 \times 5.5 \times 0.0154 \text{ m}^3 \\ &= 1.0164 \text{ m}^3 \end{aligned}$$

15 b Let the slant height be s m.

$$s^2 = (0.7)^2 + (0.8)^2 \quad \{\text{Pythagoras}\}$$

$$\therefore s = \sqrt{(0.7)^2 + (0.8)^2}$$

$$\therefore s \approx 1.06 \quad \{\text{as } s > 0\}$$

So, the slant height of the cone is approximately 1.06 m.

