Comparing rates and best buys

6 questions | 16 marks

Equivalent correct methods earn the corresponding marks.

1. Compare 500 g for AUD 3.25 with 800 g for AUD 4.80. State the lower price per kilogram. [3 marks]

$3.25 \div 0.5 = 6.50$.

$4.80 \div 0.8 = 6$.

Answer: 800 g offer: AUD 6/kg, compared with AUD 6.50/kg.

2. Which is cheaper per pen: 3 pens for AUD 4.20 or 5 pens for AUD 6.50? [2 marks]

$4.20 \div 3 = 1.40$.

$6.50 \div 5 = 1.30$.

Answer: Five-pen pack: AUD 1.30/pen.

3. Compare 2.5 kg for AUD 9 with 1.5 kg for AUD 5.70. [2 marks]

$9 \div 2.5 = 3.60$ dollars/kg.

$5.70 \div 1.5 = 3.80$ dollars/kg.

Answer: The 2.5 kg offer is cheaper per kilogram.

4. Compare 250 mL for AUD 2.10 with 1.5 L for AUD 10.80. [3 marks]

$2.10 \div 0.25 = 8.40$.

$10.80 \div 1.5 = 7.20$.

Answer: The 1.5 L offer: AUD 7.20/L, compared with AUD 8.40/L.

5. You need at least 600 g. A 400 g pack costs AUD 3; a 1 kg pack costs AUD 7. What is the cheapest purchase? [3 marks]

Two small packs supply 800 g for AUD 6.

One large pack costs AUD 7.

Both meet the need; the small packs cost AUD 1 less.

Answer: Two 400 g packs, costing AUD 6.

6. A 500 mL bottle costs AUD 3 and a 750 mL bottle costs AUD 4.50. Find the cheapest way to buy exactly 1.5 L. [3 marks]

Both unit prices are AUD 6/L.

$3 \times 3 = 9$ and $2 \times 4.50 = 9$.

Answer: Either three 500 mL bottles or two 750 mL bottles; both cost AUD 9.