Solutions

2.1

- At £3: $-100 \times 3/900 =$ **−0.33 (inelastic)**.
- At £6: $-100 \times 6/600 =$ **−1.00 (unit)**.
- At £9: $-100 \times 9/300 =$ **−3.00 (elastic)**.
- Elasticity steepens as you climb the curve.

2.2

- £4 → £5: 3,200 → 3,500 – rose (inelastic step).
- £6 → £7: 3,600 → 3,500 – fell (elastic step).
- Crossing the unit point at £6 flips the revenue test's answer.
- The two steps straddle the peak, which is the whole lesson.

2.3

- $\%\Delta Q = 80/800 = 10\%$.
- Elasticity $= 10/8 =$ **1.25**.
- Positive (a normal good) and above 1: a **luxury** by budget share.

2.4

- Croissants: $(-40/180) \div (1/4.5) =$ **−1.0 – complements**.
- Rolls: $(+40/220) \div (1/4.5) = +0.82$ – **substitutes**.
- The sign does the classification.
- Size adds strength: −1.0 is a strong complement, +0.82 a moderate substitute.

2.5

- At £5: $\varepsilon = -100 \times 5/700 =$ **−0.71**.
- Revenue peaks where $\varepsilon = -1$: $P =$ **£6**, $Q = 600$.
- Revenue there is £3,600 – one more pound is affordable, one more is not.

2.6

- Elasticity is a percentage ratio, not a slope: it depends on P/Q as well as b.
- A flat-seeming slope at a high price can be more elastic than a steeper slope at a low one – compare points, not slopes.

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