Solutions

2.1

- Spending multiplier $= 1/(1 - 0.8) =$ **5**.
- Tax multiplier $= -0.8/0.2 =$ **−4**.

2.2

- $G + 30$: $\Delta Y = 30 \times 5 =$ **+150**.
- $T - 50$: $\Delta Y = -50 \times (-4) =$ **+200**.
- Combined: +350.

2.3

- $\Delta Y = 30 \times 5 - 30 \times 4 =$ **+30**.
- The **balanced-budget multiplier** – exactly 1.

2.4

- $G + 25$: $25 \times 5 = +125$ – overshoots by 25.
- $T - 40$: $40 \times 4 = +160$ – overshoots by 60.
- Overshoot reasons: imports and taxes leak rounds; borrowing raises rates and crowds out investment – the simple 5 is a ceiling.
- Also supply constraints: near capacity, extra demand becomes prices, not output.

2.5

- (a) A negative supply shock raises inflation while output falls – both move the wrong way for the trade-off, so 2022's combination (11.1% inflation, low unemployment) broke the simple curve.
- (b) The 2021–23 tightening was decided in 2021–22 and landed through 2023 – recognition, implementation and impact lags, exactly as the timeline shows.
- (c) One limit: the multipliers and the curve are models – CPI is one index (housing-weighted), and supply shocks vs demand cannot be separated cleanly in real time.
- State the model with its limits – the episode supports a reading, not a verdict.

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