Solutions

2.1

- Clicks = 500,000 × 0.022 = 11,000.
- Unique visits = 4,200 (given; dedup already applied).
- Trial rate = 630/4,200 = 15.0% of unique visits.

2.2

- CAC = 9,000/378 = £23.81.
- Retention = 252/378 = 66.7%.

2.3

- LTV/CAC = 21,700/9,000 = 2.41.
- Below the healthy 3: scale spend only into channels that lift retention, not just installs.

2.4

- Holdout: disable retargeting in a random region for a month.
- Measure the sales gap against the claimed 60%.
- If sales barely move, the claim was attribution fiction – the orders would have happened anyway.

2.5

- CTR rises with the wrong visitors – the denominator fills with clickbait traffic that never converts.
- CAC blends channels; a mix shift changes the number without any channel getting better or worse.