Solutions

2.1

- The cohort (samples by exposure; risks estimable) ✓.

2.2

- $0.10/0.05 = \text{RR } 2.0$ ✓.

2.3

- $\text{OR} = (40 \times 30)/(10 \times 20) = 6.0$ ✓.

3.1

- Risks: $36/400 = 9$ %; $12/400 = 3$ % ✓.
- $\text{RR} = 9/3 = 3.0$ ✓.
- Attributable fraction $= (3-1)/3 = 67$ % of exposed events ✓.
- Claims: the share of exposed cases owing to exposure – assuming the exposure is causal and unconfounded ✓.

3.2

- $\text{OR} = \text{ad/bc} = (30 \times 40)/(20 \times 10) = 6.0$ ✓.
- RR illegal: the 50/50 case-control split is the researcher's choice, not the population's risks ✓.
- Rare outcome → odds ≈ risks within groups → OR ≈ RR ✓.