1B (I) is true. People who consent are likely different from people who do not [Chp1 U2]. (II) is false. With so many subjects, randomisation makes the groups similar, even if the sizes are different [Chp1 U4]. See clofibrate trial in Unit 8.

2A The rates must add up to 100%.

3C To show association, need to compare groups, such as residents vs non-residents.

4B (I) is true. (II) is false. Overall acceptance rates depend on the number of people in the subgroups. This is like Simpson's paradox [Chp1 U9].

5A This is a reverse of (I) in Q4.

6C

7C odds = rate / (1-rate) [Chp2 U3].

8A Correlation only measures linear association [Chp2 U5].

9A rate(exposed | diseased) = 20/40 = 0.50. rate(exposed | not diseased) = 20/60 = 0.67.

10D rate(diseased | A) = 30/75 = 0.40. rate(diseased | B) = 10/25 = 0.40.

11C Swap the rows, then do cross-product-ratio [Chp2 U3].

12C Attenuation [Chp2 U9].

13A In each country, the sum of rate(attending university) and rate(private tuition) is less than 100%.

14D By regression effect, this group will improve, but still below average. [Chp2 U9].

15B This is a change of scale [Chp2 U6].

16C This is case-control study [Chp2 U3].