

195. Kevin and Kira are in a history competition:

- (i) In each round, every child still in the contest faces one question. A child is out as soon as he or she misses one question. The contest will last at least 5 rounds.
- (ii) For each question, Kevin's probability and Kira's probability of answering that question correctly are each 0.8; their answers are independent.

Calculate the conditional probability that both Kevin and Kira are out by the start of round five, given that at least one of them participates in round 3.

- (A) 0.13
- (B) 0.16
- (C) 0.19
- (D) 0.22
- (E) 0.25