10	8b	Two identical biased coins are tossed together, and the outcome is recorded. After a large number of trials it is observed that the probability that both coins land showing heads is 0.36. What is the probability that both coins land showing tails?	2

State Mean:
0.56/2

P(both heads) = 0.36

$\therefore$ P(head) = $\sqrt{0.36}$

      = 0.6

$\therefore$ P(tail) = 1 − P(head)

     = 1 − 0.6

     = 0.4

$\therefore$ P(both tails) = 0.4 × 0.4

       = 0.16

* These solutions have been provided by *projectmaths* and are not supplied or endorsed by the Board of Studies

Board of Studies: Notes from the Marking Centre
This part was not very well answered by most candidates. The most common incorrect answer was $(TT) = 1 - 0.36 = 0.64$. A number of candidates merely wrote down the answer 0.36, reasoning that the required outcome had the same probability as achieving two heads. A significant number of candidates incorrectly determined that $(TT) = 0.64 \times 0.64 = 0.4096$.
Source: http://www.boardofstudies.nsw.edu.au/hsc_exams/