

Five balls are placed in a bag. Each ball is labelled with a 2, 4, 6, 8, or 10, with no ball having the same label as any other. Adeleke randomly chooses a ball, records the integer on the ball, and replaces the ball into the bag. Then Bo randomly chooses a ball, records the integer on the ball, and replaces the ball into the bag. Finally, Carlos randomly chooses a ball, records the integer on the ball, and replaces the ball into the bag.

Determine the probability that the product of the three recorded integers is not a power of 2.

