

A deck of playing cards consists of 52 cards divided into 4 "suits": hearts, clubs, spades, and diamonds. Each suit consists of 13 cards with different values: 9 "number" cards (numbered 2, 3, 4, 5, 6, 7, 8, 9, and 10), 3 "face" cards (Jack, Queen, and King) and an Ace.

A card is chosen at random, its value is recorded, and it is returned to the deck. Then a second card is chosen at random. What is the probability that both cards are Aces?

Express your answer as a fraction "A/ B" in simplest form.