

The Handshake Problem: The Supreme Court of the United States

There are nine justices on the U.S. Supreme Court. Every year, the Supreme Court session begins with each judge shaking hands with every other judge.

Chief Justice Melville W. Fuller (1888-1910) started this custom, saying it shows "that the harmony of aims, if not views, is the court's guiding principle."

If each justice shakes hands exactly once with each of the other justices, how many handshakes will there be? Show how you got your answer.