import itertools

n = int(input())

p = tuple(map(int,input().split()))

q = tuple(map(int,input().split()))

a = []

for i in range(1,n+1):

a.append(i)

b = list(itertools.permutations(a))

#print(b)

P = b.index(p)

Q = b.index(q)

#print(P)

#print(Q)

print(abs((P+1)-(Q+1)))