def factorial(num):

factorial = 1

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

factorial = factorial\*i

return factorial

def combinations(a,b):

return (factorial(a)/factorial(b))

m = int(input())

n = int(input())

x = int(input())

y = int(input())

probW = m / (m+n)

probB = n / (m+n)

answer=0

for z in range(x,y-1,-1):

temp=combinations(x,z)

answer+=temp\*((probW)\*\*z)\*((probB)\*\*(x-z))

print(round(answer, 4))