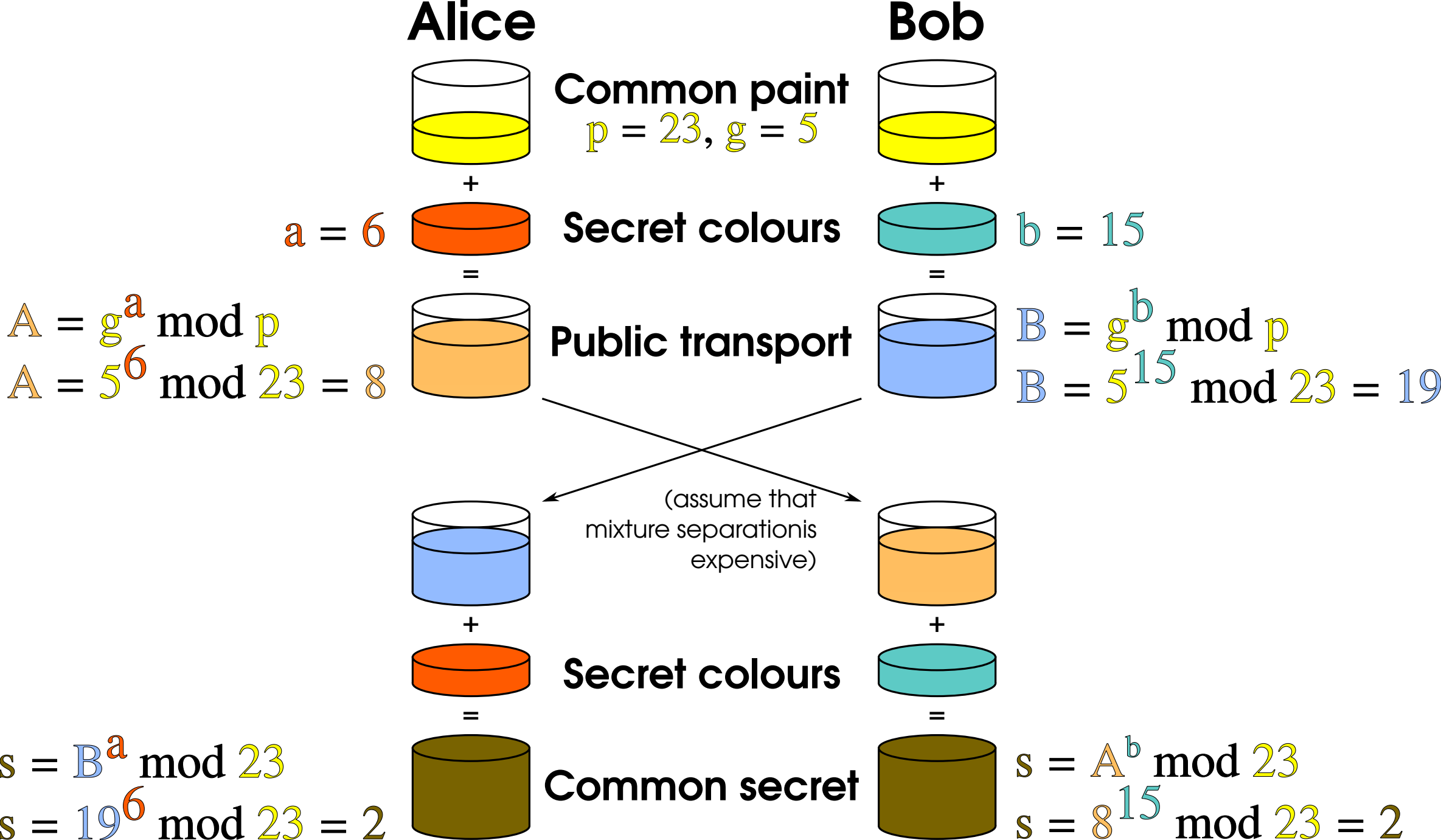
Alice
Bob
Common paint
p = 23, g = 5
+
a = 6
Secret colours
b = 15
=
A = g^a mod p
A = 5^6 mod 23 = 8
Public transport
B = g^b mod p
B = 5^15 mod 23 = 19
(assume that mixture separationis expensive)
+
Secret colours
+
=
s = B^a mod 23
s = 19^6 mod 23 = 2
Common secret
s = A^b mod 23
s = 8^15 mod 23 = 2