

Disco II - Quiz 8

Name: _____

Box # _____

In this quiz we will use the inclusion-exclusion principle (or other principles) to compute the number of functions from one set to another. Our sets are: $A = \{R, G, B, Y, O\}$, (colors) and $B = \{1, 2, 3, 4, 5\}$ (numbers).

1. Compute the number of onto functions $f : A \rightarrow B$ in any manner you like. Write out the numerical answer.

2. In any way you like, compute the number of functions $f : A \rightarrow B$ whose range is exactly three elements. Write out the numerical answer.