

Quiz 1

True/False - No explanation needed. (For each: 1 point if correct, 0 points if not answered, -1 points if incorrect)

1. When X and Y are mutually disjoint, we need only add the sizes of X and Y to find the size of $X \cup Y$. True/False
2. To find how many possibilities there are for *exactly* one of X and Y occur, we take $|X \cup Y|$ and then subtract the size of the intersection. True/False

Problems - Need justification.

1. How many functions f are there from $\{1, 2, 3, 4, 5\}$ to $\{1, 2, 3\}$ if $f(2) \leq 2$ (5pts)

2. How many positive integers between 50 and 250 are divisible by either 3 or 7?