

Math 301

Quiz 6

Show all work in a neat and organized fashion. Clearly indicate your answers.
10 points possible.

1. (10 pts.) (a) How many different anagrams (including nonsensical words) can be made from INDEPENDENCE?

(b) How many different anagrams (including nonsensical words) can be made from INDEPENDENCE given that the last three letters must be END (in that order)?

(c) How many different anagrams (including nonsensical words) can be made from INDEPENDENCE given that the first six letters must be DEPEND (in that order)?

(d) How many different anagrams (including nonsensical words) can be made from INDEPENDENCE given that the three letters P, I, and C must appear in this order (but not necessarily contiguous with each other)?

Optional Bonus Problem. (2 optional bonus points possible.) How many different anagrams (including nonsensical words) can be made from REPLETE with no consecutive E's?