

HW #0

Kouba

Fundamental Principle of Counting

1.) A shoe tree in your closet has room for seven pairs of shoes. If you place four pairs of shoes (black, gray, white, and pink ones) in the shoe tree, how many different ways can you arrange the pairs if

- a.) they must occupy the top four slots of the shoe tree ?
- b.) there must be a space between the pairs
- c.) there can be no spaces between the pairs ?
- d.) there can be no spaces between the pairs and the black and pink shoes must be next to each other ?

