

# CSE 191 Recitation

4/17/23 - 4/21/23 - Counting



# Counting Exercises

**How many ways can you...**

Arrange 5 letters of the alphabet

Select what shirt you will wear each day of the week if you own 10 shirts

Choose what sport you will play from 4 different options

Pick from your 10 friends to make a 6-person team

Pick a sport and 6 friends for the team

# Counting Problem

Imagine a group of 10 friends get together to play some board games one night. They will have to split into smaller groups. They have two 5-player games, two 3-player games, and a 4-player game.

**How many possible ways can they split up so that all 10 people get to play a game, and that each game they play has the maximum number of players?**

# Counting Problem

Imagine a group of 10 friends get together to play some board games one night. They will have to split into smaller groups. They have two 5-player games, two 3-player games, and a 4-player game.

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**What if three of the "friends", Al, Sal, and Val, refuse to play the same game...how does that change our answer?**