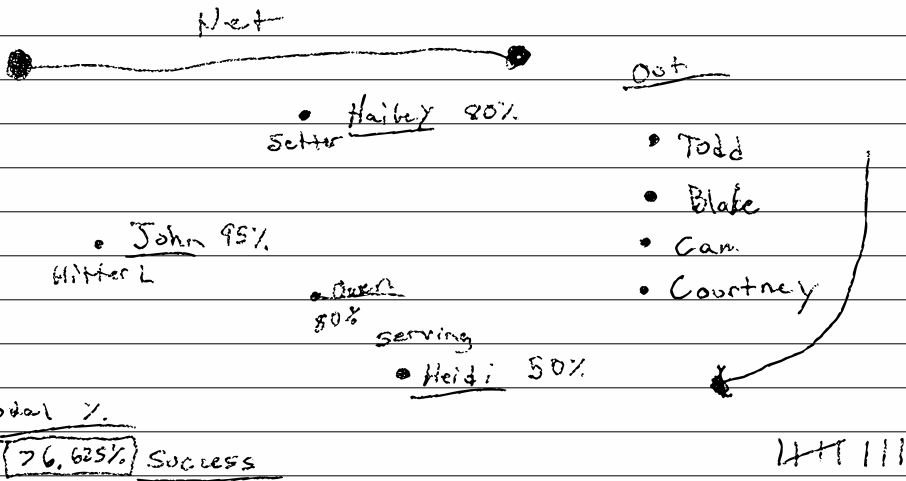


Ideal Setup for W's

Owen, Cam, Courtney, Hailey, Todd, John, Heidi, Blake
 1 2 3 4 5 6 7 8



Setters	Set %	Servers	Hit %	Hitters Hit %
John	90%	Hailey	85%	John 95
Cam	100%	Courtney	90%	Cam 90
Hailey	80%	Heidi	50%	Owen 80%
Blake	75%
...				* Estimated %

Goal to maximize (%) for the entirety of the game. (Weaknesses canceled out by others strengths)
so to maximize the % of all spots
 we must **spread talent**

Starting 4

IDEAL LINEUP: Heidi, John, Hailey, Owen
 Serving Left setter back

BENCH IN ORDER: Court, Cam, Blake, Todd
 Next to serve

Math

	Setters %	Servers %	Hitters %	Overall
0	John 90%	95%	95%	93
1	Sam 100%	95%	95%	96
2	Own 70%	85%	90%	81
3	Blake 75%	70%	70%	71
4	Court 85%	90%	75%	83
5	Hailey 90%	95%	85%	90
6	Todd 95%	90%	90%	91
7	Heidi 70%	50%	60%	60

4 in - 4 out

8! combinations
40,320

r_1
 r_2
 r_3
 r_4
 r_5
 r_6
 r_7
 r_8

$$\max \left(\sum_{i=1}^8 r_i - r_8 \right)$$

Test 70 iterations of
The max function and return
greatest max

Add up all the
averages in groups
of 4 and find greatest
overall average in
all rotations.

Code

1. Get all possible combinations of 8
2. Iterate through each 4 → adding up the
max overall Sam overall in a dict →
{Player_order: max_overall}
3. Find optimal Player order.