

Elizabeth Van Dusen  
math 331

hw for 2/8

- (12) How many license plates can be made if they consist of 3 distinct letters (A-Z) followed by 4 distinct digits (1-9, no zero)?

$$26 \cdot 25 \cdot 24 \cdot 9 \cdot 8 \cdot 7 \cdot 6$$

12 A

13 A

- (13) How many batting orders are possible for a baseball team with 15 players assuming a batting lineup contains nine players and the last one is a pitcher (and 3 pitchers are on a team)?

$$12 \cdot 11 \cdot 10 \cdot 9 \cdot 8 \cdot 7 \cdot 6 \cdot 5 \cdot 3$$

8 non-pitchers

choice  
of 3  
pitchers