General Notes

- Quiz Monday
- Five number summary (lowest number, Q_1, Q_2, Q_3, highest number)
    - Need to know Median and Quartile stuff
    - IQR
    - Box plot that can be drawn from five number summary
    - Inner fences
    - Mean
    - Variance
    - Standard deviation

Probability (continued)

Dividing a deck of cards:

____	SPACES	HEARTS	DIAMONDS	CLUBS
A				
K				
Q			X	
J				
10				
9				
8				
7				
6				
5				
4				
3				
2				

Possibilities: {A-S (Ace of Spaces), K-S, ..., 2-C)}

If A is a set then we will use $n(A)$ to refer to the number of objects (elements)

Event: a set of possible results (outcomes)

Event: flipping a coin three times
$H_1 = \{HTT, THT, TTH\}$
$R_{2T}(\text{R} = \text{two tails in a row}) = \{HTT, TTH\}$ – exactly 2
$A(\text{alternating}) = \{THT, HTH\}$
$S(\text{the same}) = \{HHH, TTT\}$
SS (sample space itself)
$\{\}$ (empty set)

Event: rolling a die twice
$S_{10}(\text{sum is } 10) = \{(4, 6), (5, 5), (6, 4)\}$

Probability

If E is an event for some experiment then $P(E)$ refers to the best guess at the fraction of the outcomes that would be in E if the experiment were done a large number of times

Rolling a die

$P(E) = \frac{1}{2}$ to roll an even number