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| NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_ "Nine gamblers could not feed a single rooster". -Yugoslav proverb | **Prob and Stats** |
| BlackJack | **DATE: Tuesday, May 16, 2017** |

Review:

Stephen Curry makes 43.8% of his three pointers. In the next game, he is going to take 4 in the first quarter. Assume they are independent (if he makes one, he is no more or less likely to make any others)

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| P(makes all 4): | P(misses all 4): |
| P ( gets at least one): | P(misses at least one): |

Lets start looking at blackjack:

Key

High value card: [10 or Ace]

Soft Total: If you have an ace, it is considered soft, because you can play it as a 1 or 11.

Say you are playing alone and you are dealt 2 cards:

Find the probability of getting:

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| 1. P(2 high value cards) | 1. P(no high value cards) | 1. P(at least one high value card): |
| 1. P(card worth 10, then Ace) | 1. P( Ace, then card worth 10) | 1. P (Blackjack) |

Lets say you are playing with the dealer, alone one night in the casino:

The dealer is showing a Queen. You have a jack and a 9. You stay as you have 19. Lets say he gets just one more card. Find:

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| 1. P(you winning) | 1. P(you losing) | 1. P(draw) |

On the next hand, you get a Jack and a 5. The dealers is showing a 9. Lets say you get just one more card, find:

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| 1. P(bust) | 1. P(19,20 or 21) | 1. P(less than 19) |

Advanced:Say you are playing alone and you are dealt 2 cards:

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| 1. P(something worth doubling down on 10 or 11 hard[meaning no aces]) | 1. P(a decent hand (a total of 18 or more)) | 1. P(a “soft” 13-16-the worst possible outcomes): |