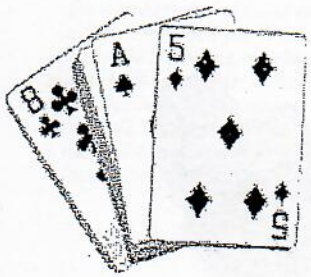
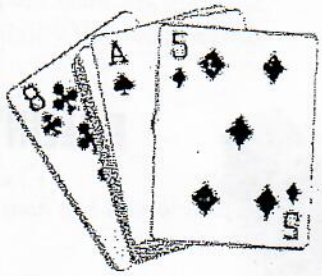


STILL FEELING LUCKY?
DRAW YOU FOR IT!



How many cards in a standard deck? 52
How many red cards? 26 / black? 26
How many suits? 4 What are they? diamonds, hearts, spades, and clubs
How many of each suit are there? 13
How many "face" cards? 12 What are they? Jack, Queen, and King
What do the "numbered" cards count from 2 to 10
How many of each kind are there? 4
Did I miss anything important? 4 Aces

Can you find the probability of drawing 1 card and getting the following?

1. P[red card] = 26/52 = 50%
2. P[face card] = 12/52 = 23%
3. P[5] = 4/52 = 7.7%
4. P[black ace] = 2/52 = 3.8%
5. P[red numbered card] = 18/52 = 34.6%
6. P[2,3, or 4] = 12/52 = 23%

Let's find if the *theoretical probability* matches the *experimental probability!*
Draw a card ____ times and record the outcome. Why ____ times? *–can we?*

TIME TO CHALLENGE YOU!

Let's draw a pair (2) of cards and find the probability of drawing the following:
HOLD IT! IS THERE SOME RULES NEEDED TO ANSWER THESE QUESTIONS?

7. P[ace, king] =
8. P[2 red cards] =
9. P[2 face cards] =
10. P[queen, and then NOT a queen] =
11. P[2 jacks] =
12. P[ace, jack]

WARNING: THIS IS WHERE THINGS GET REALLY TOUGH! DRAW 5 CARDS!

13. P[2, 3, 4, 5, 6] =
14. P[2 of a kind, 3 of a kind] =
15. P[10, jack, queen, king, ace] =
16. P[all 5, same color] =

THIS SHOULD BY NO MEANS ENCOURAGES GAMBLING. THIS IS SIMPLY AN EXPLORATION OF MATHEMATICS AND PROBABILITY.