**MATH CARD TRICK**

**PIRATE AND TREASURE**

**Trick preparation**

* The performer of the trick prepares a deck that has 32 cards and chooses two cards from the deck, one that will be the pirate and the other that will be the treasure, for example the pirate can be represented by the king and the treasure by the ace of the same suit.

• The performer of the trick chooses one person, an assistant, who will

 help perform the trick.

**Performance**

1. The performer places the pirate and the treasure on the table, face up, and divides the remaining cards face down into two decks (15 cards each).
2. The performer cuts the deck closest to him/her into two parts (they don't have to be equal) and asks the assistant to do the same with the deck closest to him/her.
3. The performer asks the assistant to place the treasure (face down) on one of the two decks made by the performer, and to cover the deck with the treasure on top with one of his own decks.
4. The performer takes the pirate and places it face up on the deck left in front of the assistant and takes his/her only deck that does not contain treasure (the "smaller" deck) and covers the pirate.
5. There are two decks on the table that the performer places on top of each other.
6. The performer of the trick asks the assistant to cut the deck into two parts and re-stack the deck so that the treasure is better hidden (this can be repeated several times).
7. The performer divides the cards alternately into two piles (1st card on the left, 2nd card on the right, 3rd card on the left, ...) until they run out of cards.
8. The helper shows the performer which of the two decks the pirate is in. The performer discards the other deck and continues only with the one containing the pirate.
9. We repeat steps 7, 8 and 9 (each time with a deck that has half as many cards) until we have only two cards left.
10. The trick is done, of the two remaining cards, one is a pirate and the other is a treasure.