

# The Five Card Toss Trick

**Effect:** A student is given 5 cards. One side of the cards have black numbers on them and the other side has red cards on them. Remind them that the ace will count as a 1. You tell the student that you will turn your back and then they are to flip the cards into the air and let them fall to the ground. They are to do this one card at a time in any order they wish.

When they are done have them tell you how many red cards are facing up on the floor. Remind them that they chose the order in which the cards were flipped and the cards landed on the floor in a random manner. You have not seen any of the cards during this process. Without turning around, you tell the students the total of the 5 cards that are face up on the floor. Turn around and verify with them that you were correct. This can be repeated 1 or 2 more times.

## Preparation:

Select **5 black cards** from a deck of cards. They must be the Ace, 2, 3, 4, and 5 of a mixture of Clubs or Spades. Select **5 red cards** from a deck of cards. They must be the 6, 7, 8, 9, and 10 of a mixture of Hearts or Diamonds.

You will now glue the red cards to the black cards with their backs glued together so the numbers face out on both sides. The red and black cards that are glued together in pairs are the **Ace and 6**, the **2 and 7**, the **3 and 8**, the **4 and 9** and the **5 and 10**.

## How it works:

The total of the black cards is  $1 + 2 + 3 + 4 + 5 = 15$ . The red side of each card is has a number 5 larger than the black side. For each red card showing the total of 15 will be **increased** by 5.

0 red cards showing will have a total of 15.

1 red cards showing will have a total of 20.

2 red cards showing will have a total of 25.

3 red cards showing will have a total of 30.

4 red cards showing will have a total of 35.

5 red cards showing will have a total of 40.

## Variations.

If you repeat the effect you can have them tell you the number of the black cards that are showing instead of the reds. The total of the black cards is  $6 + 7 + 8 + 9 + 10 = 40$ . The black side of each card is has a number 5 less than the red side. For each black card that is showing the total of 40 will be **decreased** by 5.

0 black cards showing will have a total of 40.

2 black cards showing will have a total of 25.

4 black cards showing will have a total of 35.

1 black cards showing will have a total of 20.

3 black cards showing will have a total of 30.

5 black cards showing will have a total of 40.

## Making cards with different totals.

You could use and 5 lower numbered black cards. Each of the black cards would then have a red card on the other side that is that is some number larger than it for each black card.

<b>Set A</b>		<b>Set B</b>		<b>Set C</b>	
Black	Red (2 more)	Black	Red (3 more)	Black	Red (1 more)
1	3	1	4	1	2
2	4	2	5	4	5
3	5	4	7	5	6
4	6	6	9	6	7
<u>5</u>	7	<u>7</u>	10	<u>9</u>	10
15		20		25	
Total		Total		Total	

Set A. The total of the black cards is 15. The red side of each card is has a number 2 more than the black side. For each red card that is showing the total of 15 will be **increased** by 2.

Set B. The total of the black cards is 20. The red side of each card is has a number 3 more than the black side. For each red card that is showing the total of 20 will be **increased** by 3

Set C. The total of the black cards is 25. The red side of each card is has a number 2 more than the black side. For each red card that is showing the total of 25 will be **increased** by 1.

### **Make you own cards:**

Use 3 by 5 note cards and write the numbers on with a pen. You will need to use a black marker for the numbers on one side and a red marker for the numbers on the opposite side. Make the numbers large enough to be visible by all the students.

### **Have the students make their own cards:**

The best way to be sure your students understand the concept behind the effect is for each students to make their own cards and perform the trick for others. Gove each student 5 3 by 5 notecards. ( cut them in half if you want to use less cards) They will need to use a black marker for the numbers on one side and a red marker for the numbers on the opposite side. Make the numbers large enough to be visible by all the students.

1. Have them select the 5 black numbers and write them on 5 cards.
2. They can then choose how much larger the red numbers on the other side will be. There is no limit to the numbers used because you are not limited to the numbers on playing cards. Write the red numbers on the opposite sides of the cards.
3. Find the total of the 5 black cards.
4. Let the total of the **black cards is X** and if the **red side is Y larger** then the black side. Let **R be the number of red cards** showing. The total of the cards face up on the floor is  $X + RY$

The easiest way to perform the effect.

1. Cut several blank 3 by 5 note cards in half. Hand 5 of the cards to a student.
2. Hand the student a black marker. Ask them to select any 5 numbers from 1 to 10 and write them on the 5 cards, 1 number per card. As they fill out each card take it from them, turn the card over and write a number 5 larger than their number in red.
3. Look at the 5 cards black numbers and find the total of the 5 numbers. Remember that sum.
4. Hand the student the 5 cards. Have them shuffle them up as much as they like.
5. Tell the student that you will turn your back and then they are to flip the cards into the air and let them fall to the ground. They are to do this one card at a time in any order they wish.
6. When they are done have them tell you how many red cards are facing up on the floor. Remind them that they chose the numbers. They also chose the order in which the cards were flipped and the cards landed on the floor in a random manner. You have not seen any of the cards during this process. Without turning around, you tell the students the total of the 5 cards that are face up on the floor. Turn around and verify with them that you were correct.
7. I then repeat the effect but I ask for the number of black cards and I subtract 5 for each black card face up from the total of the red cards. The total of the red cards will be 25 more than the total of the black cards.
8. I then take 5 more cards and start the effect with another student who will choose 5 different numbers with different totals. I may also use a different number to add to each card to get the red numbers.

**Note:** Be sure to underline the number 6 or the number 9 so it is clear which is which.