## switching Cards Puzzales

## Rules and Play

1. For each problem, place the cards face up in a line as shown below. Next, arrange the cards so that all the numbers are in order from smallest on the left to largest on the right by switching adjacent cards. Then answer the question that follows $($ Ace $=1$, Jack $=11$, Queen $=12$, King = 13).
a. How many moves did it take to complete the task?

b. How many moves did it take to complete the task?

c. How many moves did it take to complete the task?

d. How many moves did it take to complete the task?

e. How many moves did it take to complete the task?


## Switching Cords Puzzles

f. How many moves did it take to complete the task?

g. How many moves did it take to complete the task?

h. How many moves did it take to complete the task?

i. How many moves did it take to complete the task?

j. How many moves did it take to complete the task?

2. Record the information you accumulated in Exercise 1 below. What patterns do you notice?

| Number of Cards | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Number of Cards |  |  |  |  |  |  |  |  |  |  |

