# Problem of the Week Grade 9 and 10 

## Card Logic

Four playing cards are placed in a row, from left to right. One card is a club $(\boldsymbol{Q})$, one card is a diamond $(\diamond)$, one card is a heart $(\diamond)$, and one card is a spade ( $\boldsymbol{\uparrow}$ ), not necessarily in that order. The number on each card is different. Using the following clues, determine the exact order of the cards, from left to right, including the suit and number.

1. The club and the spade are immediately beside each other, in that order, left to right.
2. The diamond is not the first (leftmost) card, and the heart is not the fourth (rightmost) card.
3. The 7 is somewhere to the left of the heart and the 3 is somewhere to the right of the heart.
4. The two cards whose values are still unknown add to nine.
5. From left to right, the cards are arranged from largest to smallest.

