

Solution for 4.3 Card Trick (Answer = HINDENBERG)

The cards show a game of 5-player 500 (it really helps if you have experience playing this game, otherwise, you might be able to find it based on it being pretty much the only game where you could have exactly 50 cards including a joker in play). The trump suit is diamonds; you figure out what each player's hands were, and from the fact that the mentioned builder is disappointed, you might suspect he was the player who only won two tricks despite having a pretty good hand. We realised afterwards that we should've included a hint about the bid being made, but this probably wouldn't have helped anyone - you could just try decoding all the hands anyway.

His cards, in the order that he played them, are:
7C 6C 2D JC QD AS JH 10C 10S 8C

The motivation to try translating the cards into letters comes from the fact that there isn't really any other way information could be encoded into it - perhaps this was far from obvious, but it so happened that all the testers we tried this on got it. Anyway, you notice there are 26 cards, but $53=2*26+1$ cards, so to get it working, you'd have to remove a card - the only one that stands out and hence is a candidate for removal is the joker.

The alphabet ordering is obviously, just got A to Z; ordering the cards requires a little more thought. It seems sensible to arrange them in decreasing order of rank, starting with trumps, then going to other suits in decreasing bid value. This gives:

JD JH AD KD QD 10D 9D ... 2D AH KH QH 10H 9H ... 2H (26 cards)
AC KC ... 2C AS KS ... 2S (26 cards)
A B C ... Z (26 letters)

Matching them up in this way translates the hand above to HINDENBERG.

We know this is hard, but we couldn't give you all easy puzzles. :)