

The example is from Hugh Kelsey's "Winning Card Play".



To acquire 3 tricks Kelsey suggests playing the Ace at trick one followed by the 5 and a low card from the hand no matter which card East is playing. This is based on the reasoning that if the suit breaks 4-2 West is more likely to be in possession of Kx or Qx rather than a small doubleton.

The best line according to the analysis is also the line starting with the Ace.

| Cards   |  |                                  |                                  | Tricks required  |                                  | Analyse   | Distributions  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
|---|--|----------------------------------|----------------------------------|------------------|----------------------------------|---|--|------|-----|------|---------------------------|---------------------------------|---------------------------|-----------------------------------|---|--|--------------------------------------|---------------------------|--|---|---------------------------|-----------------------------------|---------------------------|---------------------------------|
|   | South  | North                            | East/West                        | Tricks           |                                  |   | Win  | Lose |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| A   | <input type="radio"/>  | <input checked="" type="radio"/> | <input type="radio"/>            | 3                |                                  | A5<br><table border="1" style="margin: auto;"> <tr><td></td><td>N</td><td></td></tr> <tr><td>W</td><td></td><td>E</td></tr> <tr><td></td><td>S</td><td></td></tr> </table> JT643<br><br>Tricks: 3         |  | N    |     | W    |                           | E                               |                           | S                                 |   | North plays the Ace [66.21%]<br>-> East:2 South:4 or 6<br>-> East:K South:4 or 6 |                                      |                           |  |   |                           |                                   |                           |                                 |
|   | N  |                                  |                                  |                  |                                  |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| W   |  | E                                |                                  |                  |                                  |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
|   | S  |                                  |                                  |                  |                                  |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| K   | <input type="radio"/>  | <input type="radio"/>            | <input checked="" type="radio"/> | On lead          |                                  | <input type="checkbox"/> N:A [66.21%]<br><input type="checkbox"/> S:4 [66.21%]<br><input type="checkbox"/> S:6 [66.21%]<br><input type="checkbox"/> N:5 [64.60%]<br><input type="checkbox"/> S:J [54.91%] | <table border="1"> <thead> <tr> <th>Win</th> <th>Lose</th> </tr> </thead> <tbody> <tr> <td>0-6 [0.00%, 0.0000%]<br/>-</td> <td>0-6 [0.75%, 0.7453%]<br/>-KQ9872</td> </tr> <tr> <td>1-5 [0.00%, 0.0000%]<br/>-</td> <td>1-5 [7.27%, 1.2112%]<br/>x-xxxx(6)</td> </tr> <tr> <td>2-4 [16.15%, 1.6149%]<br/>KQ-987x<br/>K9-Q87x<br/>K8-Q97x<br/>K7-Q98x<br/>Q9-K87x<br/>Q8-K97x<br/>Q7-K98x<br/>9x-KQ87<br/>8x-KQ97<br/>7x-KQ98</td> <td>2-4 [8.07%, 1.6149%]<br/>Kx-Q987<br/>Qx-K987<br/>98-KQ7x<br/>97-KQ8x<br/>87-KQ9x<br/>-</td> </tr> <tr> <td>3-3 [35.53%, 1.7764%]<br/>xxx-xxx(20)</td> <td>3-3 [0.00%, 0.0000%]<br/>-</td> </tr> <tr> <td>4-2 [14.53%, 1.6149%]<br/>Kxxx-Qx(4)<br/>Qxxx-Kx(4)<br/>xxxx-KQ</td> <td>4-2 [9.69%, 1.6149%]<br/>KQxx-xx(6)<br/>-</td> </tr> <tr> <td>5-1 [0.00%, 0.0000%]<br/>-</td> <td>5-1 [7.27%, 1.2112%]<br/>xxxx-x(6)</td> </tr> <tr> <td>6-0 [0.00%, 0.0000%]<br/>-</td> <td>6-0 [0.75%, 0.7453%]<br/>KQ9872-</td> </tr> </tbody> </table> |      | Win | Lose | 0-6 [0.00%, 0.0000%]<br>- | 0-6 [0.75%, 0.7453%]<br>-KQ9872 | 1-5 [0.00%, 0.0000%]<br>- | 1-5 [7.27%, 1.2112%]<br>x-xxxx(6) | 2-4 [16.15%, 1.6149%]<br>KQ-987x<br>K9-Q87x<br>K8-Q97x<br>K7-Q98x<br>Q9-K87x<br>Q8-K97x<br>Q7-K98x<br>9x-KQ87<br>8x-KQ97<br>7x-KQ98 | 2-4 [8.07%, 1.6149%]<br>Kx-Q987<br>Qx-K987<br>98-KQ7x<br>97-KQ8x<br>87-KQ9x<br>- | 3-3 [35.53%, 1.7764%]<br>xxx-xxx(20) | 3-3 [0.00%, 0.0000%]<br>- | 4-2 [14.53%, 1.6149%]<br>Kxxx-Qx(4)<br>Qxxx-Kx(4)<br>xxxx-KQ | 4-2 [9.69%, 1.6149%]<br>KQxx-xx(6)<br>- | 5-1 [0.00%, 0.0000%]<br>- | 5-1 [7.27%, 1.2112%]<br>xxxx-x(6) | 6-0 [0.00%, 0.0000%]<br>- | 6-0 [0.75%, 0.7453%]<br>KQ9872- |
| Win   | Lose   |                                  |                                  |                  |                                  |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| 0-6 [0.00%, 0.0000%]<br>-   | 0-6 [0.75%, 0.7453%]<br>-KQ9872  |                                  |                                  |                  |                                  |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| 1-5 [0.00%, 0.0000%]<br>-   | 1-5 [7.27%, 1.2112%]<br>x-xxxx(6)  |                                  |                                  |                  |                                  |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| 2-4 [16.15%, 1.6149%]<br>KQ-987x<br>K9-Q87x<br>K8-Q97x<br>K7-Q98x<br>Q9-K87x<br>Q8-K97x<br>Q7-K98x<br>9x-KQ87<br>8x-KQ97<br>7x-KQ98 | 2-4 [8.07%, 1.6149%]<br>Kx-Q987<br>Qx-K987<br>98-KQ7x<br>97-KQ8x<br>87-KQ9x<br>- |                                  |                                  |                  |                                  |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| 3-3 [35.53%, 1.7764%]<br>xxx-xxx(20)  | 3-3 [0.00%, 0.0000%]<br>-  |                                  |                                  |                  |                                  |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| 4-2 [14.53%, 1.6149%]<br>Kxxx-Qx(4)<br>Qxxx-Kx(4)<br>xxxx-KQ  | 4-2 [9.69%, 1.6149%]<br>KQxx-xx(6)<br>-  |                                  |                                  |                  |                                  |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| 5-1 [0.00%, 0.0000%]<br>-   | 5-1 [7.27%, 1.2112%]<br>xxxx-x(6)  |                                  |                                  |                  |                                  |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| 6-0 [0.00%, 0.0000%]<br>-   | 6-0 [0.75%, 0.7453%]<br>KQ9872-  |                                  |                                  |                  |                                  |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| Q   | <input type="radio"/>  | <input type="radio"/>            | <input checked="" type="radio"/> | Side entries     |                                  | <input type="button" value="Compare"/>  |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| J   | <input checked="" type="radio"/>   | <input type="radio"/>            | <input type="radio"/>            | North            | <input type="radio"/>            |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| T   | <input checked="" type="radio"/>   | <input type="radio"/>            | <input type="radio"/>            | South            | <input checked="" type="radio"/> |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| 9   | <input type="radio"/>  | <input type="radio"/>            | <input checked="" type="radio"/> | Known side cards |                                  |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| 8   | <input type="radio"/>  | <input type="radio"/>            | <input checked="" type="radio"/> | West             | <input type="text" value="0"/>   |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| 7   | <input type="radio"/>  | <input type="radio"/>            | <input checked="" type="radio"/> | East             | <input type="text" value="0"/>   |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| 6   | <input checked="" type="radio"/>   | <input type="radio"/>            | <input type="radio"/>            | Max HCP          |                                  |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| 5   | <input type="radio"/>  | <input checked="" type="radio"/> | <input type="radio"/>            | West             | <input type="text" value="10"/>  |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| 4   | <input checked="" type="radio"/>   | <input type="radio"/>            | <input type="radio"/>            | East             | <input type="text" value="10"/>  |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| 3   | <input checked="" type="radio"/>   | <input type="radio"/>            | <input type="radio"/>            |                  |                                  |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |
| 2   | <input type="radio"/>  | <input type="radio"/>            | <input checked="" type="radio"/> |                  |                                  |   |  |      |     |      |                           |                                 |                           |                                   |   |  |                                      |                           |  |   |                           |                                   |                           |                                 |

|             |                      |
|-------------|----------------------|
| Force lines | <input type="text"/> |
| Avoid lines | <input type="text"/> |

Click on a variation to show the distributions. Check two variants and press Compare for making a comparison.

Figure 1

But on inspecting the distributions an interesting observation is made. The 3 distributions with doubleton 92, 82 and 72 in West are counted as winning distributions and the 2 distributions with doubleton K2 and Q2 in West are counted as losing distributions. In the situation after Ace from North, 7 (or 8, 9) from East, 3 from South and 2 from West followed in trick 2 by 5 from North and 8 (or 7, 9) from East it is therefore a better chance to cover than to play low.

The situation can be explained by use of the Principle of Restricted Choice. From the distributions D2-K987 and K2-Q987 East has the choice between 3 different combinations of cards of equal rank to play in the first two rounds: 7 and 8, 7 and 9 or 8 and 9. The probabilities of these distributions are thereby being reduced to a third. From 92-KQ87 (or 82-KQ97, 72-KQ98) East's choice is restricted to one, namely the only two small cards available. The odds are therefore 3:2 in favour of finding the 9 (or 7, 8) in West.

The probability for success of the overall playing line by adopting this variation is increased by 1.6149% to 66.21% as can be inferred from the percentages of the variants and the percentages for the distributions in the "Distributions" pane.