PROBLEM 4

	North				
	♠ A 4 3 2	DEALER WEST	VULN: N-S		
	♥ A 10 2				
	♦ 5 4 3 2	S	W	N	E
	♣ 5 4		Pass	Pass	Pass
		1♣	Pass	1♦	Pass
	South	1♥	Pass	1♠	Pass
	♠ J	3♣	Pass	3♥	Pass
	♥ J 7 4 3	5♣	All Pass		
	♦ 9				
	♣ A K Q J 10 9 2		WEST LEADS ♦K		

East overtakes the king of diamonds and switches to a spade; South's jack is covered by the king and won by the ace.

Declarer can afford to lose only one heart trick; so he must hope for a favorable lie of the suit. *A priori*, any of the following combinations could see him home.

a) KQ on the left.
     This can be ruled out: West would have opened with 13 high-card points.

b) Doubleton KQ on the right.
     This combination is highly improbable on a percentage basis alone. Besides, East shows up with a singleton trump, which would then give him a 5-2-5-1 or 6-2-4-1 or 4-2-6-1 shape. Holding such a hand including the ace of diamonds and the KQ of hearts, he would surely have entered the bidding.

c) Doubleton honor with a singleton trump on the right.
     South leads small from dummy and whether East plays low or puts up his honor, guesses the position to score two tricks and ruff his fourth heart in dummy.
     However, the objections raised in case b) apply here as well.
     Furthermore, the defense could defeat the contract by playing a trump at trick two and by allowing West to win the heart trick so that he can lead a second trump, preventing a heart ruff in dummy.

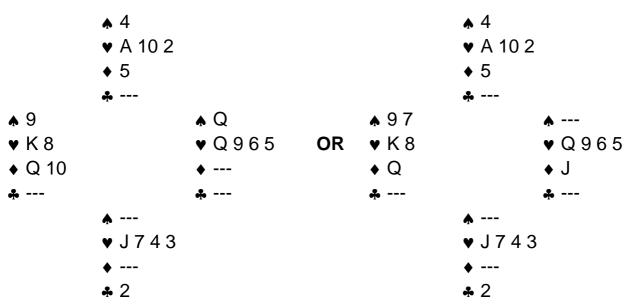d) A doubleton honor with the eight (or nine) on the left.
     Keeping in mind the bidding, this layout is certainly the most likely one.
     Declarer's plan is to play a low heart from hand, intending to put in the ten, lose to East, then cash the ace, capturing West's honor, and pick up East's eight (or nine) on a finesse.

However, the defense can foil this plan: **West puts up his honor on the first round of hearts**. Dummy must win and the entry required to finesse against East's heart spots is lost.
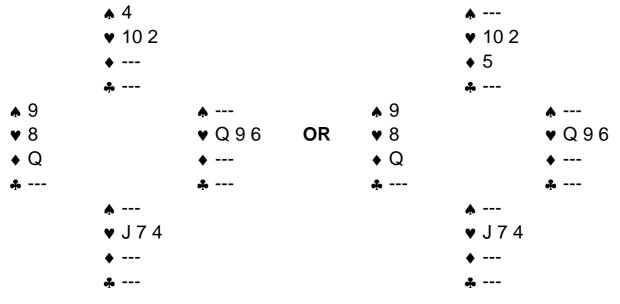
Since North now lacks the entry to pick up East's hearts, declarer has to manoeuvre in such a way that East will be stripped of all his cards but hearts and **eventually will have to lead the suit himself and present South with a free finesse.**

SOLUTION

Before attacking the heart suit, South plays off all but one of his trumps to reach the following position (East had to hang on to his four hearts) :

	♠ 4				♠ 4	
	♥ A 10 2				♥ A 10 2	
	♦ 5				♦ 5	
	♣ ---				♣ ---	
♠ 9		♠ Q		♠ 9 7		♠ ---
♥ K 8		♥ Q 9 6 5	**OR**	♥ K 8		♥ Q 9 6 5
♦ Q 10		♦ ---		♦ Q		♦ J
♣ ---		♣ ---		♣ ---		♣ ---
	♠ ---				♠ ---	
	♥ J 7 4 3				♥ J 7 4 3	
	♦ ---				♦ ---	
	♣ 2				♣ 2	

After leading the three of hearts, on which West must put up the king, won by North, declarer ruffs a spade or a diamond, **the suit in which East kept a card in addition to his hearts.** This is the final three-card position:

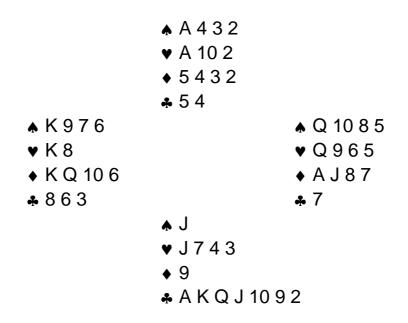|	♠ 4				♠ ---	
	♥ 10 2				♥ 10 2	
	♦ ---				♦ 5	
	♣ ---				♣ ---	
♠ 9		♠ ---		♠ 9		♠ ---
♥ 8		♥ Q 9 6	**OR**	♥ 8		♥ Q 9 6
♦ Q		♦ ---		♦ Q		♦ ---
♣ ---		♣ ---		♣ ---		♣ ---
	♠ ---				♠ ---	
	♥ J 7 4				♥ J 7 4	
	♦ ---				♦ ---	
	♣ ---				♣ ---	

A heart is led to the ten and East is forced to play into South's jack-seven tenace.

The only question left open is how will declarer know which card (spade or diamond) he should ruff at trick ten. In other words, how is he to guess which card East kept besides his hearts.

The clue lies once again in the bidding, or rather in the absence of bidding by the opponents. Give West a five-card suit, or East a 5-4-3-1 or 3-4-5-1 distribution, and it is a near certainty that one of them would have found an overcall, especially with the favorable vulnerability. This leads to the conclusion that neither opponent has a five-card suit, giving East a 4-4-4-1 distribution.
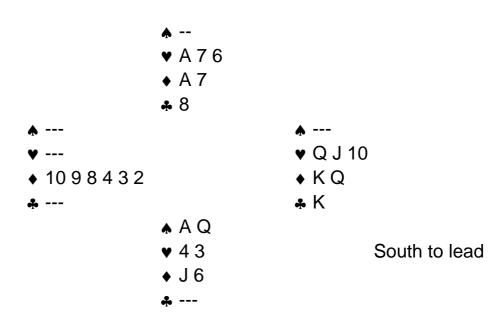
The full deal:

```
                        ♠ A 4 3 2
                        ♥ A 10 2
                        ♦ 5 4 3 2
                        ♣ 5 4
      ♠ K 9 7 6                        ♠ Q 10 8 5
      ♥ K 8                            ♥ Q 9 6 5
      ♦ K Q 10 6                       ♦ A J 8 7
      ♣ 8 6 3                          ♣ 7
                        ♠ J
                        ♥ J 7 4 3
                        ♦ 9
                        ♣ A K Q J 10 9 2
```

PROBLEM 5

North
♠ K 10
♥ A K 7 6
♦ A 7 5
♣ 8 5 4 2

South
♠ A Q J 9 8 7 6
♥ 4 3 2
♦ J 6
♣ A

DEALER EAST   VULN: E-W

S	W	N	E
			1♥
4♠	Pass	6♠	All Pass

WEST LEADS ♥5

The opening lead is won in dummy with the king.

Declarer can count eleven top tricks. The twelfth can only come from a squeeze against East provided he holds the KQ of diamonds in addition to his five hearts. In view of his opening bid, prospects for that are good. Declarer can begin to imagine an ending with the jack of diamonds in hand (after a Vienna coup) and the hearts in dummy exerting pressure on East. But this line of reasoning will not go very far. Indeed, in order to bring about the position for the squeeze, standard technique requires that a trick be given up to rectify the count, and that's where the trouble begins. In whichever suit declarer tries to give up a trick, East will return a heart and break up the squeeze.[1]

Forced to abandon the above line of play, declarer's attention turns to another, somewhat more complex type of squeeze. If East alone has a club guard, in addition to guarding the red suits, then he can be subjected to a *three-suit squeeze without the count*. That means he has to hold 5-5 in hearts and clubs, plus the KQ of diamonds (1-5-2-5 or 0-5-3-5). This is the end position to set up:

```
                          ♠ --
                          ♥ A 7 6
                          ♦ A 7
                          ♣ 8
        ♠ ---                            ♠ ---
        ♥ ---                            ♥ Q J 10
        ♦ 10 9 8 4 3 2                   ♦ K Q
        ♣ ---                            ♣ K
                          ♠ A Q
                          ♥ 4 3            South to lead
                          ♦ J 6
                          ♣ ---
```
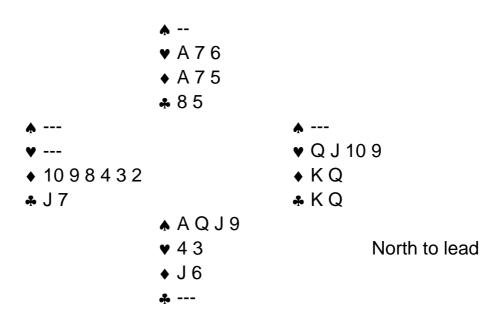
South plays a spade, throwing dummy's small diamond and East is squeezed in three suits. He will surely discard a diamond, because he can *see* the heart and club menaces on the table but not the diamond menace: from his viewpoint, his partner might hold the jack. The ace of diamonds collects the king and South still has a trump entry to cash the jack of diamonds.

With that layout in view, South must start by isolating the club guard in the East hand (strip West of his three clubs). He cashes the ace of clubs, enters dummy with a spade, East following, ruffs a club, reenters dummy with a spade intending to ruff another club. Bad news: East follows with a second trump! He cannot have 5-5 in the rounded suits plus the KQ of diamonds **and** two trumps. So, declarer is forced to abandon this line of play as well.
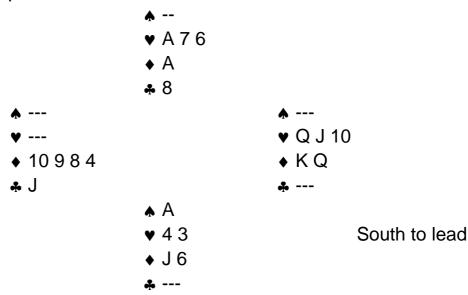
But South discovers at this stage that his supply of squeeze combinations is not yet exhausted.

SOLUTION

This is the position after the fifth trick:

```
                    ♠ --
                    ♥ A 7 6
                    ♦ A 7 5
                    ♣ 8 5
   ♠ ---                        ♠ ---
   ♥ ---                        ♥ Q J 10 9
   ♦ 10 9 8 4 3 2               ♦ K Q
   ♣ J 7                        ♣ K Q
                    ♠ A Q J 9
                    ♥ 4 3               North to lead
                    ♦ J 6
                    ♣ ---
```
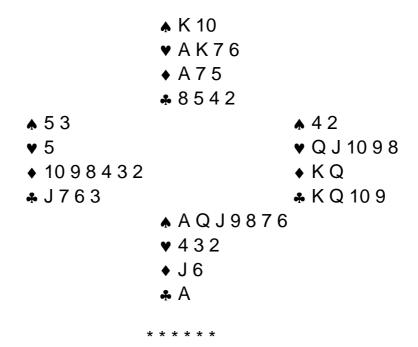
South ruffs a club and leads two more rounds of trumps, blanking the ace of diamonds. East can afford to throw a heart on the first round, but on the second one he must keep his red suits intact; so he must part with his last club, to reach the following five-card position:

```
                    ♠ --
                    ♥ A 7 6
                    ♦ A
                    ♣ 8
   ♠ ---                        ♠ ---
   ♥ ---                        ♥ Q J 10
   ♦ 10 9 8 4                   ♦ K Q
   ♣ J                          ♣ ---
                    ♠ A
                    ♥ 4 3               South to lead
                    ♦ J 6
                    ♣ ---
```

Declarer crosses to dummy with the ace of hearts, West throwing a diamond, and presents the eight of clubs. If East discards a heart, reducing himself to fewer hearts than dummy, South ruffs and exits with a heart to establish dummy's seven. If East discards a diamond honor, South throws his last heart. West wins the club
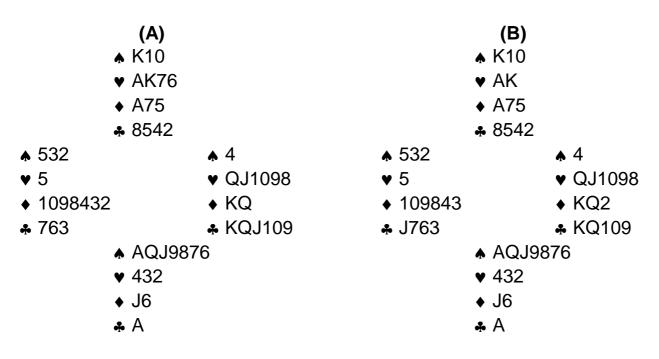
and has nothing but diamonds to return. The ace picks up East's other honor, and South returns to hand with a heart ruff to cash the jack of diamonds.

The full deal:

```
                    ♠ K 10
                    ♥ A K 7 6
                    ♦ A 7 5
                    ♣ 8 5 4 2
        ♠ 5 3                      ♠ 4 2
        ♥ 5                        ♥ Q J 10 9 8
        ♦ 10 9 8 4 3 2             ♦ K Q
        ♣ J 7 6 3                  ♣ K Q 10 9
                    ♠ A Q J 9 8 7 6
                    ♥ 4 3 2
                    ♦ J 6
                    ♣ A
```

* * * * * *

N.B. A keen analyst may have noticed that the **same winning solution works also if East's distribution is 1-5-3-4 instead of 2-5-2-4** (interchange, say, the two of spades and the two of diamonds). But **clever false-carding by the defense can throw declarer off the right track!**

If East has a singleton spade, there are, a priori, two possible layouts allowing declarer to win: (A) with East holding 1-5-2-5 and (B) with 1-5-3-4:

```
              (A)                              (B)
          ♠ K10                            ♠ K10
          ♥ AK76                           ♥ AK
          ♦ A75                            ♦ A75
          ♣ 8542                           ♣ 8542
  ♠ 532           ♠ 4            ♠ 532            ♠ 4
  ♥ 5             ♥ QJ1098       ♥ 5              ♥ QJ1098
  ♦ 1098432       ♦ KQ           ♦ 109843         ♦ KQ2
  ♣ 763           ♣ KQJ109       ♣ J763           ♣ KQ109
          ♠ AQJ9876                        ♠ AQJ9876
          ♥ 432                            ♥ 432
          ♦ J6                             ♦ J6
          ♣ A                              ♣ A
```

The play goes exactly the same way, card by card, in both cases throughout the first nine tricks:

Trick 1 - heart five, *king*, eight, two
Trick 2 - club two, nine, *ace*, three
Trick 3 - spade six, two, *ten*, four
Trick 4 - club four, ten, *spade seven*, club six
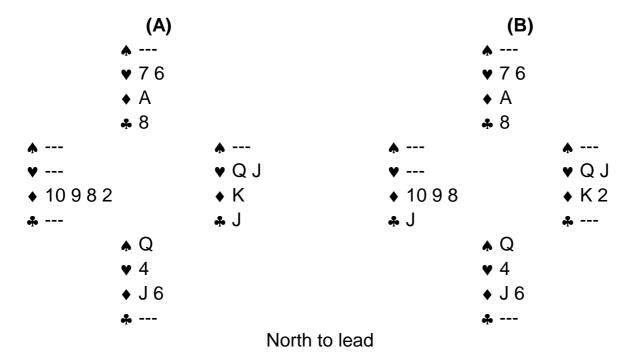Trick 5 - spade eight, three, *king*, heart nine
Trick 6 - club five, **queen**, *spade nine*, club seven
Trick 7 - *spade jack*, five, diamond five, **club king**
Trick 8 - *spade ace,* diamond four, diamond seven, **diamond queen**
Trick 9 - heart three, diamond four, *heart ace,* ten

At this stage, these are the four-card positions:

```
              (A)                               (B)
         ♠ ---                             ♠ ---
         ♥ 7 6                             ♥ 7 6
         ♦ A                               ♦ A
         ♣ 8                               ♣ 8
 ♠ ---        ♠ ---             ♠ ---           ♠ ---
 ♥ ---        ♥ Q J            ♥ ---           ♥ Q J
 ♦ 10 9 8 2   ♦ K           ♦ 10 9 8         ♦ K 2
 ♣ ---        ♣ J             ♣ J             ♣ ---
         ♠ Q                               ♠ Q
         ♥ 4                               ♥ 4
         ♦ J 6                             ♦ J 6
         ♣ ---                             ♣ ---
```

North to lead

The moment of truth has arrived!

Obviously, in position (A) the winning play now is to cash the ace of diamonds to spear East's blank honor. In (B), the right play is to lead the eight of clubs, either ruffing or throwing a heart, depending on East's discard, as we have already seen. But East's shrewd false-carding on tricks six through eight in the (A) variant means that declarer has no way of knowing whether to play against position (A) or (B) and has to commit himself with no way to recover if he goes wrong.

Finding two trumps on the right on the actual deal was in fact a blessing for declarer in that it ruled out the 1-5-2-5 alternative and cut down his winning options to one.

* * * * * *

[1] The idea of giving up a club trick to *West* (who can't break up the squeeze with a heart return) may cross declarer's mind, (West would have to hold at least six clubs), but this will be only a passing thought: there are various obstacles in the actual layout to prevent this manoeuvre.

PROBLEM 6

North
♠ 7 4
♥ 2
♦ K 5 4 3 2
♣ Q 9 8 3 2

DEALER WEST   VULN: N-S

S	W	N	E
	1♣	Pass	1♠
Dbl.	Pass	2♦	Pass
2SA	Pass	3NT	All Pass

South
♠ A 10 2
♥ K Q J 10
♦ A 7 6
♣ K 7 6

WEST LEADS ♠6

East plays the jack and South ducks. Spades are continued, South ducks again and West wins with the king. Now West switches to the ten of diamonds to disrupt declarer's communications.
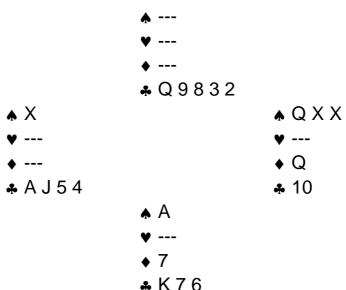
* * * * *

Declarer can count one trick in spades, three in hearts, two in diamonds and needs three club tricks to fulfil his contract; for that he needs to find a singleton ten or jack on his right. Furthermore, if West has three diamonds, the contract is doomed. In order to succeed, declarer has to assume that the East-West hands are laid out like this:

West
♠ K X X
♥ A X X X
♦ 10 X
♣ A J X X

East
♠ Q J X X X
♥ X X X X
♦ Q J X
♣ 10

Declarer must win the ten of diamonds in dummy to keep an entry in his hand. His plan is to strip West of all his spades, hearts and diamonds, so that with only clubs left, he will be forced to give up three tricks in the suit.

However, if a heart is played at trick four - a play that seems logical - the plan is bound to fail. West wins with the ace of hearts and exits with his second diamond. South cashes all his winners but one (for example, the ace of spades) to reach the following position:

```
                        ♠ ---
                        ♥ ---
                        ♦ ---
                        ♣ Q 9 8 3 2
        ♠ X                             ♠ Q X X
        ♥ ---                           ♥ ---
        ♦ ---                           ♦ Q
        ♣ A J 5 4                       ♣ 10
                        ♠ A
                        ♥ ---
                        ♦ 7
                        ♣ K 7 6
```
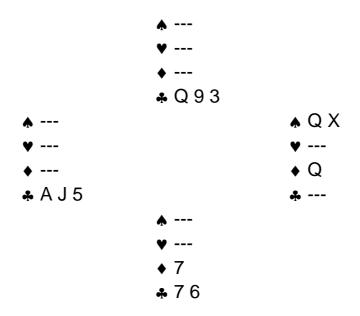
On the ace of spades North discards the two of clubs, but when South plays the king of clubs, won by West, **dummy is subjected to a one-suit squeeze**. If he follows with the *three*, dummy's remaining Q98 will block the suit; West's return of a small club will have to be won in dummy and another club trick lost. If dummy follows with the *eight*, West will exit with the *jack* of clubs; now declarer either stays in dummy and loses a trick to West's five-spot, or comes to his hand with the seven of clubs, only to lose a diamond to East. One down either way.

If declarer does not cash the ace of spades but leads the king of clubs instead, West wins and returns a spade himself to bring about the same one-suit squeeze against dummy.
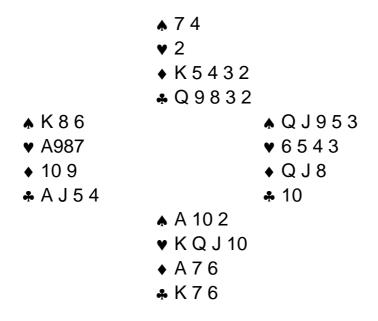
SOLUTION

The winning line of play requires the following timing: at trick four, declarer must play a club from dummy to his king (West must duck[1]) and only then attack the heart suit. West wins and continues with a diamond. South wins, cashes all his heart winners and the ace of spades, throwing dummy's diamonds and the eight of clubs, to reach this ending:

```
              ♠ ---
              ♥ ---
              ♦ ---
              ♣ Q 9 3
♠ ---                        ♠ Q X
♥ ---                        ♥ ---
♦ ---                        ♦ Q
♣ A J 5                      ♣ ---
              ♠ ---
              ♥ ---
              ♦ 7
              ♣ 7 6
```

With seven tricks already in the bag, South plays a club and scores two more tricks.

The full deal:

```
                    ♠ 7 4
                    ♥ 2
                    ♦ K 5 4 3 2
                    ♣ Q 9 8 3 2
♠ K 8 6                           ♠ Q J 9 5 3
♥ A987                            ♥ 6 5 4 3
♦ 10 9                            ♦ Q J 8
♣ A J 5 4                         ♣ 10
                    ♠ A 10 2
                    ♥ K Q J 10
                    ♦ A 7 6
                    ♣ K 7 6
```

[1] If West takes the ace of clubs to play a diamond, South cashes dummy's four club tricks, finessing the jack, and shifts to hearts. West can take the ace any time but has to concede the remaining tricks.