

## PROBLEM 1

North  
♠ A J 6 5 2  
♥ J 10 9 8 7 6  
♦ 9 6  
♣ ---

South  
♠ K 7  
♥ A K Q  
♦ Q J  
♣ J 8 7 5 4 3

DEALER SOUTH VULN: E-W

S	W	N	E
1NT	2♠	Dbl.	Pass
Pass	2NT	4♦*	Pass
4♥	All Pass		

\* Transfer to hearts

WEST LEADS ♦A

After the ace of diamonds, West cashes the king of diamonds, then exits with a small club.

West's 2NT bid is an attempt to bail out of a desperate situation in the hope of finding a fit in one of the minor suits. Such tight-rope walking, when vulnerable, can only be justified if his distribution is 5-0-4-4.

Had West exited with a spade at trick three, the contract would be easily won as follows: South wins with the king and continues a spade to the jack, which must be ruffed by East who exits with a trump. After ruffing two clubs in dummy and two spades in hand, dummy still has enough trumps left (three) to draw East's two remaining trumps and cash the ace of spades for the tenth trick.

West's counter-attack in clubs shortens dummy's trumps and thus foils the above line of play. However, it opens the way to another winning line: **setting up the club suit.**

## SOLUTION

South ruffs the club in dummy, comes to hand with the king of spades at trick four, ruffs a second club and presents a **small spade** from dummy. East must ruff and return a trump; otherwise declarer cannot be prevented from making his nine trumps separately on a cross-ruff.

Another club is ruffed to reach the following position:

	♠ A J 6 ♥ J 10 ♦ --- ♣ ---	
♠ Q 10 9 ♥ --- ♦ X ♣ A	♠ --- ♥ A K ♦ --- ♣ J 8 7	♠ --- ♥ 5 4 ♦ X X X ♣ ---
		North to lead

Declarer needs to make all the remaining tricks. The ace of spades is played, which East must ruff (otherwise South throws a club and cross-ruffs the rest), South overruffs, ruffs a fourth club in dummy and returns to his hand by drawing East's last trump to cash the two remaining clubs.

The full hand:

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

N.B. If West's distribution, though unlikely, had been 5-1-3-4 or 5-1-4-3, the recommended line of play would have come to the same result.

Supposing his distribution were 6-0-4-3 or 6-0-3-4 (unlikely, since he would have stayed in 2♠ doubled), the contract would be unmakeable, for East-West would have no trouble scoring two spade ruffs and two top diamonds.

## PROBLEM 2

North	DEALER NORTH VULN: E-W			
♠ A J 10 9	S	W	N	E
♥ A 10 9 4 3			1♥	Pass
♦ A			2♣	Pass
♣ 6 5 4			2♠	Pass
	3♣	Pass	4♣	Pass
South	4♠	Pass	6♣	All Pass
♠ K 5 2	WEST LEADS ♦J			
♥ 7 2				
♦ 8 6 4				
♣ A K 8 7 3				

The final contract is over-optimistic, to say the least, but let's try to win it anyway. To succeed with the slam, a set of conditions bordering on a miracle has to be fulfilled.

**The first condition** is obviously to find the trumps three-two.

**The second condition** is to make four tricks in the spade suit by finessing the queen the right way. That gives us eight tricks in the black suits, plus two red aces and a diamond ruff for a total of eleven. Where can the twelfth trick come from?

a) **A second diamond ruff.**

That will not work because of entry problems. Declarer can come to hand once with the king of spades and once with a high trump but will not be able to get off dummy after ruffing the last diamond. Here is the position (after having made the right guess on the queen of spades)

♠ A J	
♥ A 10 9 4 3	
♦ ---	
♣ ---	
♠ 5	
♥ 7 2	
♦ ---	North to lead
♣ K 8 7 3	

and no East-West holding will allow declarer to win.

- b) **Establish the heart suit after discarding the losing heart on dummy's fourth spade.**

Now we are on the right track but serious entry problems again get in the way. Three entries are needed: two to ruff out the hearts in order to set up the suit and a third to go back and cash the master heart, but only two are available: the ace of hearts and a diamond ruff.

It is therefore necessary to visualize a combination where **an opponent will solve declarer's entry problem by having to lead to the master heart himself.**

For that to happen, **West must hold two blank honors in hearts (third condition).**

Thus, the ace and the first heart ruff collect West's two honors; later declarer picks up East's honor by pushing dummy's ten through for a ruffing finesse, setting up the nine and leaving East with a small heart.

The only thing left to do is to strip East of all his other cards, and to throw him in with the third trump and thus force him to put dummy in with his remaining small heart.

Therefore, the **fourth condition** is that **the three trumps be held by East.**

Finally, **East must also hold four spades (fifth condition)**; otherwise he could ruff the fourth spade and exit with a diamond. In other words, East's initial distribution must be 4-4-2-3.

One final question remains: where should declarer look for the queen of spades? Obviously, probabilities strongly favor finding it in the hand holding four spades; in other words, he should finesse the queen through East.

East's hand has to be: ♠QXXX ♥HXXX ♦XX ♣XXX (H= honor.)

All the above considerations lead to the only successful line of play:

### SOLUTION

At trick two, declarer leads the jack of spades from dummy and lets it ride, then follows with the ten and lets it ride as well.

Two rounds of trumps are drawn, the king of spades is unblocked and dummy re-entered with the ace of hearts. The ace of spades is cashed, South throwing his losing heart, a small heart is ruffed to reach the following four-card ending:

	♠ --		
	♥ 10 9 4		
	♦ ---		
	♣ 6		
♠ ---		♠ ---	
♥ ---		♥ H X	H = honor
♦ X X X X		♦ X	
♣ ---		♣ H	
	♠ ---		
	♥ ---		
	♦ 8 6		
	♣ 8 7		

A diamond is ruffed in dummy, the ten of hearts is led, covered by East and ruffed by South. Now declarer leads out his last trump to throw in his right-hand opponent, who has to concede the last trick to dummy's nine of hearts.

The full deal:

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

## PROBLEM 3

North  
 ♠ K 9 8 3  
 ♥ Q 5 4  
 ♦ A K 7 5  
 ♣ 6 3

South  
 ♠ A 5 4 2  
 ♥ A K J 10 9  
 ♦ 8  
 ♣ 7 4 2

DEALER SOUTH VULN: N-S

S	W	N	E
1♥	2NT	Dbl.	Pass
Pass	Rdbl.	Pass	3♣
Pass	Pass	3♥	Pass
4♥	All Pass		

WEST LEADS ♠ 10

West's 2NT bid shows a minor two-suiter, and the redouble asks his partner once again to choose between diamonds and clubs. Thus, one may conclude that West's minor suits are of equal length since, faced with his partner's non-committal pass, he would have bid a six-card suit had he had one. East bids clubs to show where his values are. The spade lead, certainly a singleton, completes the picture of West's shape (1-2-5-5); so that declarer is now faced practically with a double-dummy problem.

South, with five trump tricks and two each in spades and diamonds, can think of different ways to bring home the tenth trick:

- Play a club right away, intending to ruff the third club in dummy. This line will fail because East can give his partner two spade ruffs.
- Draw one round of trumps before attacking the club suit. This leaves West with only one trump and his ruffing one of declarer's *losing* spades does not jeopardize the contract.

But this time East counters by playing a heart at every opportunity to prevent dummy from ruffing a club.

- Try to create a position where East is endplayed and has to concede two spade tricks.

It is easy to reach the following position:

	♠ K 9 8	
	♥ ---	
	♦ A K 7	
	♣ ---	
♠ ---		♠ Q J 7
♥ ---		♥ ---
♦ X X X X		♦ X X
♣ X X		♣ X
	♠ 5 4 2	
	♥ 9	North to lead
	♦ 8	
	♣ 7	

Declarer leads the ace and king of diamonds, ruffs a diamond, but of course East throws a spade, keeping the club for the setting trick. The idea was fine but **he timing was wrong**.

To come down to the winning end position, East has to be forced to part with his club, and this manoeuvre is possible only if he is forced to discard while he still has a trump left.

In other words, the right hand opponent is subjected to a squeeze in three suits: spades, clubs, and trumps!

This unusual form of squeeze is called a "Knockout" squeeze.

### SOLUTION

After winning the opening lead with the ace<sup>1</sup>, South plays a diamond to the king and ruffs a diamond<sup>2</sup>, draws one round of trumps keeping the queen in dummy and exits with a club. The defenders have to return a trump.

Declarer wins with the queen, cashes the ace of diamonds throwing a club and comes down to this position:

	♠ K 9 8	
	♥ 5	
	♦ 7	
	♣ 6	
♠ ---		♠ Q J 7
♥ ---		♥ 7
♦ X X		♦ ---
♣ X X X X		♣ X X
	♠ 5 4 2	
	♥ K J	North to lead
	♦ ---	
	♣ 7	

The seven of diamonds is led. East cannot afford to ruff; therefore:

**a) East discards a club**

South ruffs and exits with a club to reach this position:

	♠ K 9 8	
	♥ 5	
	♦ ---	
	♣ ---	
♠ ---		♠ Q J 7
♥ ---		♥ 7
♦ X		♦ ---
♣ X X X		♣ ---
	♠ 5 4 2	
	♥ K J	
	♦ ---	
	♣ ---	

- 1) If East wins the trick, he either returns a trump and is then endplayed in spades, or leads a spade and gives up a trick in the suit right away.
- 2) If West is on lead, the card he plays is ruffed by North, overruffed by East and then by South. South, North and East will have nothing but spades left and the stage is finally set for the endplay.

**b) East discards a spade.**

Declarer ruffs the diamond, plays the king and a small spade, to reach this ending:

	♠ 9	
	♥ 5	
	♦ ---	
	♣ 6	
♠ ---		♠ ---
♥ ---		♥ 7
♦ X		♦ ---
♣ X X		♣ X X
	♠ 5	
	♥ K	
	♦ ---	
	♣ 7	East to lead



The defense cannot prevent declarer from scoring two more tricks.

The full deal:

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

<sup>1</sup>If the opening lead is won in dummy with the king, East can later let his partner ruff the *ace* of spades (instead of a small one).

<sup>2</sup>If the second diamond honor is cashed too early, South will face an insurmountable discarding problem:

- a) If South discards a *club*, East will be able to let his partner ruff North-South's losing spade, but he will still have another spade trick coming with the QJ.
- b) If South discards a *spade*, when East is later subjected to the three-suit squeeze, he can resist the pressure by throwing a spade.

The following layout is reached, which turns out to be a *losing position*:

	♠ K 9 8	
	♥ 5	
	♦ ---	
	♣ 6	
♠ ---		♠ Q J
♥ ---		♥ 7
♦ X		♦ ---
♣ X X X X		♣ X X
	♠ 5 4	
	♥ K	
	♦ ---	
	♣ 7 4	South to lead

Declarer can of course establish a spade trick without cashing the king (playing small in both hands). East counters by returning a club, won by West who leads out his last diamond for a ruff and discard all around the table. North ruffs, but East, instead of overruffing, throws his last spade and the defense is bound to score a fourth trick, either in clubs or with the seven of trumps.