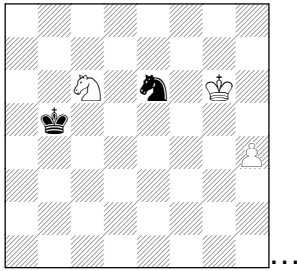


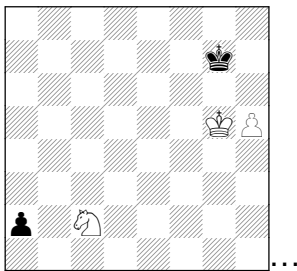
## KNIGHT ENDINGS



## KNIGHT ENDINGS

This chapter deals with endings in which a knight with pawns fights against a knight with pawns or without them; we will also examine knight vs. pawns endings.

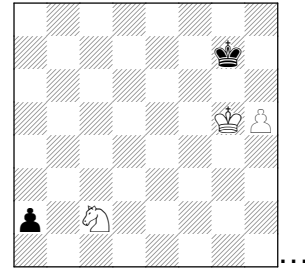
## KNIGHT'S FEATURES



## KNIGHT'S FEATURES

As well as other pieces, the knight has its advantages and disadvantages. Let us examine them.

## Knight has restricted mobility

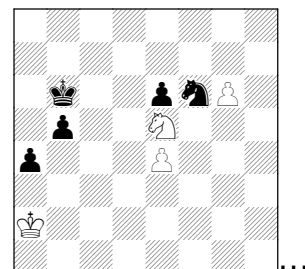


## Knight has restricted mobility

The knight's main feature is its short range. Sometimes this feature prevents a stronger side from converting a large material advantage into a win; sometimes it condemns a weaker side to a loss.

In the diagrammed position White is unable to win, because his knight has to watch over the a2-pawn and therefore cannot help the king and the h5-pawn.

## Rinck H

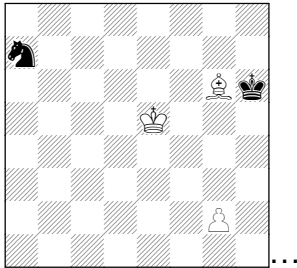


## (Conclusion of a study)

After 1. Nd7+! Nxd7 2. e5! White wins - due to its restricted mobility the black

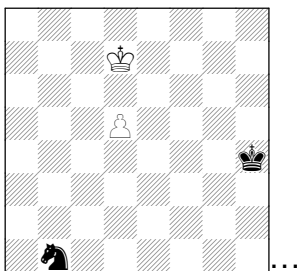
knight is unable to stop the g-pawn.

#### Example 16



1. Kf6! , and Black cannot prevent mate in two moves by 2. g4 and 3. g5#

#### Moravec Jaroslav (CZE) 2

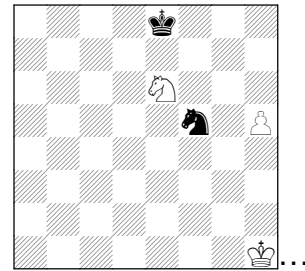


1. d6! , and the knight cannot catch the pawn, for example 1... Nc3

[Or 1... Nd2 2. Kc7! (but not 2. Ke7? in view of 2... Nc4 3. d7 Ne5 4. d8=Q Nc6+ , with a draw) 2... Ne4 3. d7 Nc5 4. d8=Q+ , and White wins]

2. Kc6! ("shoulder-charging") 2... Ne2 3. d7 Nd4+ 4. Kd5! □

A knight has difficulties fighting against a rook's pawn

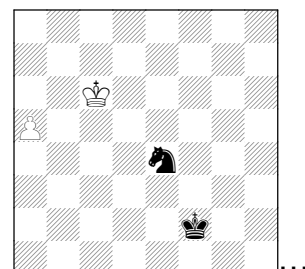


A knight has difficulties fighting against a rook's pawn

This feature is easily explained: knight's activity on the edge of the board is limited to a great extent. Eight squares are available to a central knight, while from a corner the knight commands only two squares.

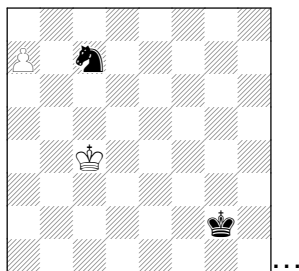
1. Ng7+! Nxc7 2. h6 Kf8 3. h7 , and the pawn queens - the clumsy knight has obstructed its own king's way to the white pawn.

#### Ardid R Rey



Black is unable to stop the a-pawn.

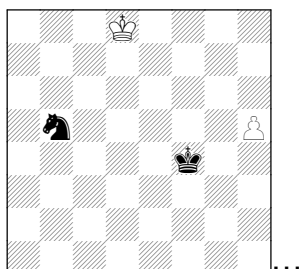
#### Example 17



### Instructive example

A lone knight cannot cope with a rook's pawn on the 7th rank; the help of the king is needed in order to obtain a draw.  
After 1. Kc5 White wins easily.

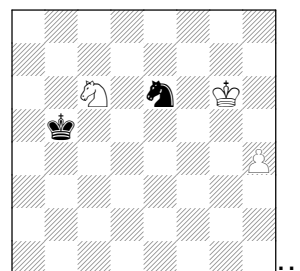
### Cheron A



Here too, Black is helpless.

1. h6 Nd6 2. h7 Nf7+ 3. Ke7 Nh8 4. Kf6!  
("shoulder-charging"). White wins.

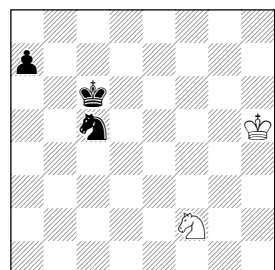
### Eingorn V. - Beliavsky A.



The same rule works in knight and pawn vs. knight endings: while fighting against a rook's pawn, one cannot save with the knight without the help of the king. The two following examples confirm this conclusion.

1. Nd4+! Nxd4 2. Kf6! Nc2 3. h5 Ne3 4. Kg5 Nc4 5. h6 . Black resigned.

### Tsaga G. - Panchenko A., Kalimaneshti, 1993



1... a5 2. Ng4!?

[No better is 2. Nd1 a4 3. Nc3 a3 4. Kg4 in view of 4... Ne4! 5. Na2 Kc5 6. Kf3 Kd4! 7. Nb4 (if 7. Ke2 , then 7... Nc3+ 8. Kd2 Nxa2 9. Kc2 Kc4!°; or 7. Nc1 Nc5 8. Ke2 Kc3 9. Kd1 Kb2 , winning) 7... Kc3 8. Na2+ Kb2 9. Nb4 Kb3 10. Nd3 Nc5!! 11. Nxc5+ Kc2 12. Na6 Kc3 , and Black wins]

2... a4 3. Ne3 Kb5

[Only a draw results from 3... a3?? 4.

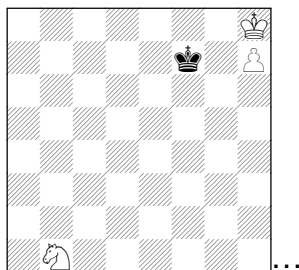
Nc2 a2 5. Nb4+ Kb5 6. Nxa2]

4. Kg4

[Also losing is 4. Nc2!? Kc4 5. Kg4 (or 5. Na3+ Kb4 6. Nc2+ Kc3 7. Na3 Ne6 8. Kg4 Kb4! 9. Nb1 Nd4 10. Kf4 Ne2+ 11. Ke3 Nc3 12. Nd2 a3°) 5... Ne6! 6. Na3+ (6. Kg3 Kb3 7. Ne1 Kc3!°) 6... Kb4 7. Nb1 Nd4 with the idea of ♖e2-c3°]

4... a3 5. Kf3 a2 6. Nc2 Kc4 7. Ke2 Kc3 8. Kd1 Nb3‡ White resigned.

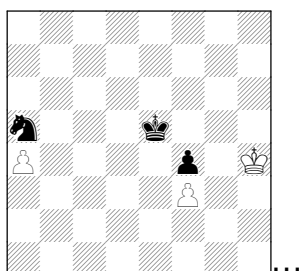
A knight is unable to gain a tempo



A knight is unable to gain a tempo

In spite of his large material advantage, White is unable to win, for example 1. Nc3 Kf8 2. Ne4 Kf7 3. Ng5+ Kf8 , and so on. But if it is Black to move, White wins.

Averbakh Yuri L (RUS)



1. Kg4!

[But not 1. Kg5? Nc4 2. Kg4 Ne3+ 3. Kg5 Ng2! 4. a5 Kd5 , and Black wins]

1... Nc4 2. Kg5 with a draw, as the knight cannot gain a tempo.

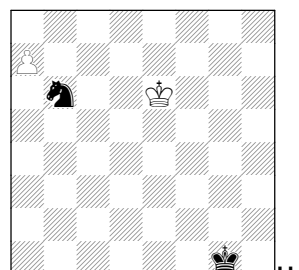
We have examined the disadvantages of the knight; now there is time to discuss its advantages, with the following three being the most important:

I. It can erect a "barrier" in front of the enemy king.

II. It is a nimble piece.

III. It works wonders.

A knight can erect a "barrier" in front of the enemy king



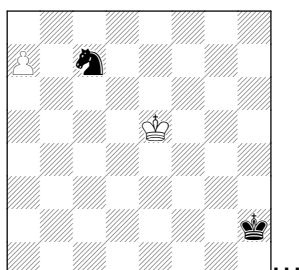
A knight can erect a "barrier" in front of the enemy king

The knight creates these "barriers" thanks to its ability to fork the opponents pieces. Sometimes these "barriers" allow the defender to save, sometimes they help

the stronger side to win.

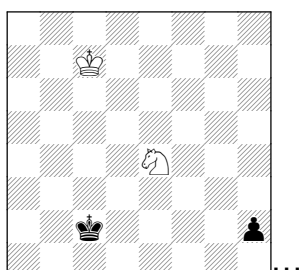
The squares a4, c4, c8, d5, d7 are attacked by the knight, and the d6- and e7-squares are inaccessible to the white king because of a fork. Therefore, the white king can get from e6 to b7 not in three moves, but only in five. If the black king is on the 1st rank, White wins; otherwise the black king is able to reach the c7-square in time, and Black draws.

**Averbakh Yuri L (RUS) 2**



The following squares are inaccessible to the white king: b5, d4, d5, e6, and e8. As a result, the black king has time to reach the c7-square, therefore - draw. 1. Kf6 Kg3 2. Ke7 Kf4 3. Kd7 Na8 4. Kc6 Ke5 5. Kb7 Kd6 6. Kxa8 Kc7 Stalemate.

**Grigoriev Nikolay (RUS) 5**



Conclusion of a study

1. Ng3! The only move.

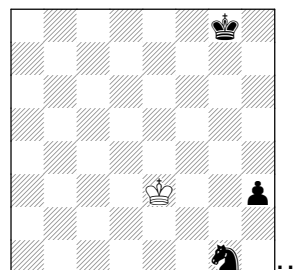
[Losing is 1. Nf2? Kd2 2. Kd6 Ke2 3. Nh1 (or 3. Ne4 Kf3 4. Nd2+ Kg2°) 3... Kf3 4. Kd5 Kg2 5. Ke4 Kxh1 6. Kf3 Kg1°]

1... Kd1

[If 1... Kd3 , then 2. Kd6 , with a draw]

2. Kd6 Ke1 3. Ke5 Kf2 4. Kf4 . Draw.

**Example 18**

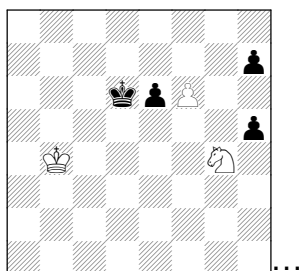


In the following examples the stronger side wins, creating a "barrier" in front of the opponent's king.

After 1. Kf2 Ne2! Black erects the "barrier", after which the king approaches his pawn, and Black wins.

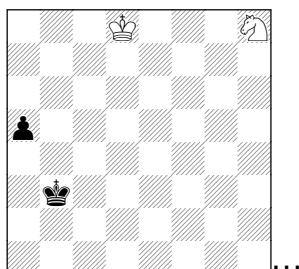
[Only a draw is achieved by 1... h2? 2. Kg2]

**Prokes L**



1. Ne5! h4 2. Nc6! ("barrier!"), and there is no defense from 3. f7. White wins.

A knight is a nimble piece



A knight is a nimble piece

Sometimes the weaker side is saved by a miracle: with the help of forks the knight catches one or even two pawns.

It looks improbable that the knight can catch the a-pawn, however, it manages to solve this task rather easily: 1. Ng6!

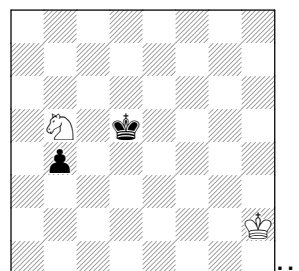
[White must chose a precise route; 1. Nf7 loses after 1... a4 2. Ne5 Kc3°]

1... a4 2. Nf4! Kc3

[Or 2... a3 3. Nd3 Kc2 , with a draw]

3. Nd5+ Kb3 4. Nf4 , and Black is unable to win.

Grigoriev Nikolay (RUS) 6



Conclusion of a study

Here a draw is achieved by an unusual knight's maneuver. 1. Nc7+ Kc4 2.

Ne8! Otherwise the knight would not be able to take control of the b1-square in time. 2... Kc5

[2... b3 would be met 3. Nd6+ Kc3 4. Ne4+ (but not 4. Nb5+? Kb4 ,and Black wins) 4... Kc2 5. Nd6! b2 6. Nc4 b1=Q 7. Na3+ , with a draw]

3. Nf6 Kd4

[if 3... b3 , then 4. Ne4+ followed by 5. a2=]

4. Ne8 Ke5

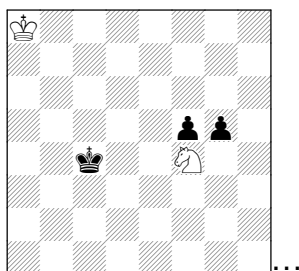
[4... b3 5. Nd6 b2 6. Nb5+ and 7. a3=]

5. Nc7 Kd6 6. Ne8+

[The only move; bad is 6. Nb5+ due to 6... Kc5 7. Nc7 b3 8. Ne6+ Kc4 , winning]

6... Kc5 7. Nf6 Kd4 8. Ne8 b3 9. Nd6 Kc3 10. Ne4+ Kc2 11. Nd6 b2 12. Nc4 b1=Q 13. Na3+ Draw.

Chekhover Vitaly (RUS)



### Conclusion of a study

The position seems to be hopeless for White, however, he saves the game with the help of forks, time after time attacking the opponent's pawns.

1. Ne6! g4 2. Ng7 f4

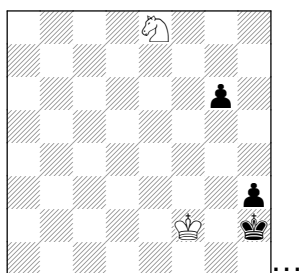
[If 2... g3, then 3. Nxf5 g2 4. Ne3+]

3. Nh5 f3 4. Nf6 g3

[After 4... f2 too, a fork saves White: 5. Nxc4 f1=Q 6. Ne3+]

5. Ne4 g2 6. Nd2+ Kd3 7. Nxf3 . Draw.

### A knight works wonders



### A knight works wonders

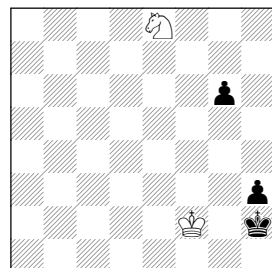
Miracles, though rarely, do occur on the chessboard. Here are several examples from the "fairy tale" chess, with the knight playing the main role.

In this position White is mating by force, no matter who is to move. 1. Nf6 Kh1

[or 1... g5 2. Ng4+ Kh1 3. Kf1 h2 4. Nf2#]

2. Ng4 h2 3. Kf1 g5 4. Nf2#

### Example 19



If Black is to move, there are two possible lines: 1... g5

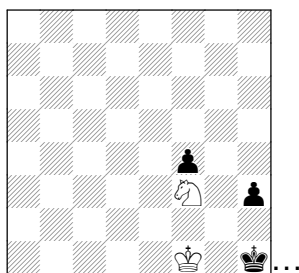
[1... Kh1 2. Nf6 Kh2 (2... h2 3. Ng4 g5 4. Ne3 g4 5. Nf1 g3+ 6. Nxc3#) 3. Ng4+ Kh1 4. Kf1 g5 5. Kf2 h2 6. Ne3 g4 7. Nf1 g3+ 8. Nxc3#]

2. Nf6 g4

[Or 2... Kh1 3. Ng4 h2 4. Ne3 g4 5. Nf1 g3+ 6. Nxc3#]

3. Nxc4+ Kh1 4. Kf1 h2 5. Nf2# The idea to mate the black king smothered in the corner was known as early as in the XIII century.

Yanish K



In a similar way the game ends when Black has two pawns, bishop's and rook's.

1. Ne5! Kh2

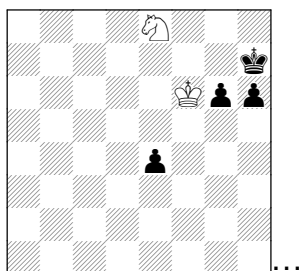
[1... h2 2. Ng4]

2. Kf2 f3

[Or 2... Kh1 3. Ng4 f3 4. Kf1 f2 5. Nxf2+ Kh2 6. Ne4 Kh1 7. Kf2 , transposing to the main line.]

3. Ng4+ Kh1 4. Kf1 f2 5. Nxf2+ Kh2 6. Ne4 Kh1 7. Kf2 Kh2 8. Nd2 Kh1 9. Nf1 h2 10. Ng3#

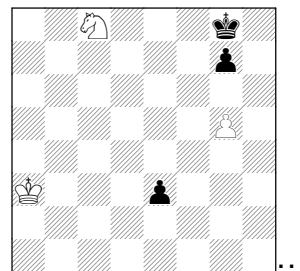
Selezniev Alexei 2



The black pawn is unstoppable, but...

1. Kf7 e3 2. Nf6+ Kh8 3. Nd5 e2 4. Nf4 e1=Q 5. Nxg6+ Kh7 6. Nf8+ Perpetual check - draw!

Iljin P



Here too, White cannot catch the e-pawn, however, he has a fantastic saving idea.

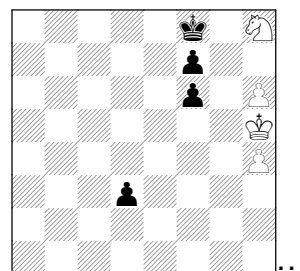
1. Ne7+ Kh7

[Bad is both 1... Kf7 2. Nc6 e2 3. Ne5+ Ke6 4. Nf3;

and 1... Kh8 2. Ng6+ Kh7 3. Nf4]

2. g6+ Kh8 3. Kb4 e2 4. Kc5 e1=Q 5. Kd6! , with a draw, as the alone queen cannot drive the king away from the knight.

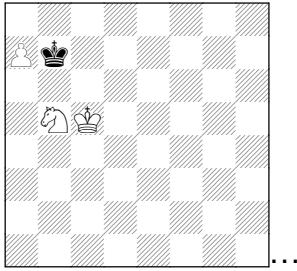
Kubbel L



1. h7 Kg7 2. Nxf7! Kxh7 3. Nh6 d2 4. Ng4 d1=Q Stalemate. Draw.

SEVERAL TYPICAL POSITIONS

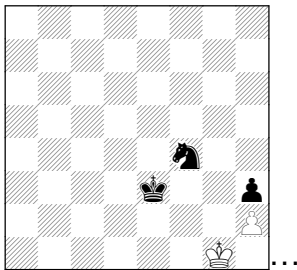




## SEVERAL TYPICAL POSITIONS

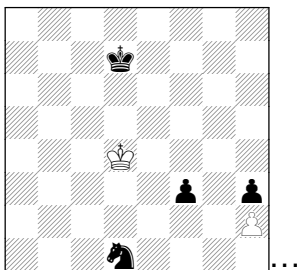
White is unable to win.

### Example 20



Black cannot evict the white king from the corner.

### Chekhov Vitaly (RUS) 2



### Conclusion of a study

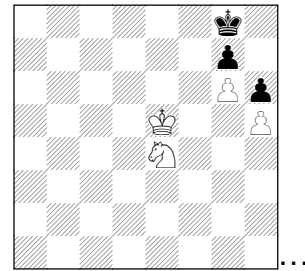
White reaches a position from the previous example and draws. 1. Kd3

Ke6 2. Kd2 f2 3. Ke2 Ke5 4. Kf1 Ke4 5. Ke2 Kf4 6. Kf1 Ne3+

[6... Ke3 - stalemate]

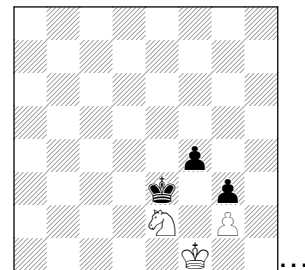
7. Kxf2 Ng4+ 8. Kg1 Draw.

### Example 21



1. Ke6 Kf8 2. Kd7 Kg8 3. Ke7 Kh8 4. Nf6! gxf6 5. Kf7 , mating.

### Reti R & Mandler A



In this position White wins in a very instructive way. 1. Ng1 Kd2

[If 1... Kd3 , then 2. Nf3 Ke3 3. Ne1 Kd2 4. Nc2! , winning]

2. Nf3+ Kd3 3. Ke1

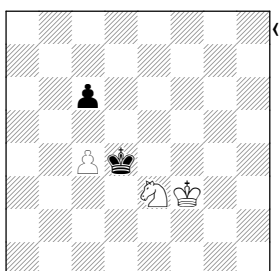
[After 3. Ne1+ , in view of 3... Ke3 4. Nc2+ Kd2 5. Nb4 Ke3 6. Nd5+ Ke4 7. Nf6+ Ke3 , White achieves nothing.]

3... Ke3 4. Ne5 Ke4

[Or 4... Kd4 5. Ng4 Kd3 6. Kd1 f3 (otherwise 7. ♟e2 would follow) 7. Ne5+]

5. Nc4 Kd3 6. Nd2 Ke3 7. Nf3 Kd3 8. Kf1  
After White has given Black the move, he is winning easily. 8... Ke3 9. Ne1 Kd2 10. Nc2! (this decides) 10... Kd1 11. Nb4! Kd2 12. Nd5 , and White wins.

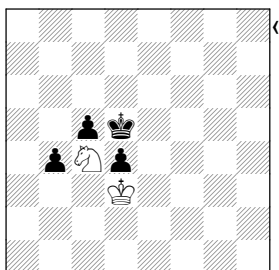
## Example 22



1... Kd3! (taking the opposition) 2. Kf2 Kd2 3. Kf3 Kd3 4. Kf4 Kd4 5. Kf5 Kxe3 6. Ke5 Kd3 7. Kd6 , with a draw.

[It was not late even to lose after 7. c5? Kc4 8. Kd6 Kb5°]

## Averbakh Yuri L (RUS) 3

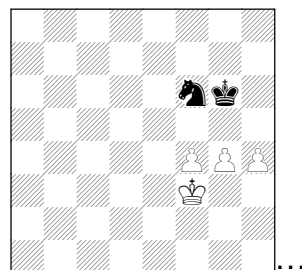


A knight can draw against three pawns

only if the pawns are not advanced far, or if the defender manages to blockade them.

1... Kc6 2. Kc2 Kb5 3. Kb3=

## Fine Reuben (USA)



Three connected pawns advanced to the 5th rank secure a win. 1. f5+!

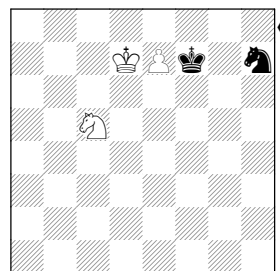
[Weak is 1. g5? Nd5 2. Ke4 Ne7! 3. Ke5 Kh5! 4. f5 Kxh4 5. Kf6 (or 5. g6 Kg5 6. g7 Ng8 7. Ke6 Nf6=) 5... Nd5+ 6. Kg6 Ne7+ with a draw]

1... Kg7 2. g5 Nd5 3. h5! Nc3

[Or 3... Kf7 4. h6 Nc3 5. h7 Kg7 6. g6 , winning]

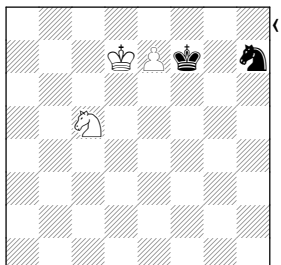
4. Kf4 Ne2+ 5. Ke5 Ng3 6. f6+ Kg8 7. h6 Nh5 8. g6 Ng3 9. h7+ Kh8 10. f7 , and White wins.

## KNIGHT AND PAWN AGAINST KNIGHT



## KNIGHT AND PAWN AGAINST KNIGHT

Pawn on the 7th rank



Pawn on the 7th rank

1... Nf6+

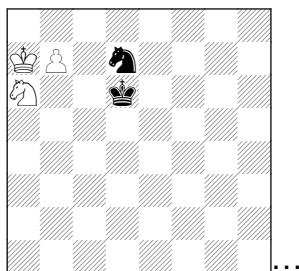
[1... Nf8+ 2. Kd8□]

2. Kd8 Ne8 3. Ne6! (this decides) 3... Nd6

[Or 3... Nf6 4. Ng5+ Kg6 5. Ne4□]

4. Kd7 Ne8 5. Ng5+ , and White wins.

Kling I



In order to win, White must transfer his knight to f8, diverting the black knight.

1. Nb4 Kc5

[Other king moves also lose, for example 1... Ke7 2. Nd5+ Ke6 3. Nb6

Ne5 4. Ka8 Nc6 5. Nc4 Kd7 6. Na5□;

1... Kc7 2. Nd5+ Kd6 3. Nb6□;

or 1... Ke6 2. Nd3 (threatening 3. ♖c5) 2... Kd6 3. Nf4 , transposing to the main line]

2. Nd3+ Kd5 3. Nf4+ Kc6 4. Ng6 Kd5

[Or 4... Kc5 5. Nf8 Ne5 6. Ka8 Nc6 7. Ne6+ Kd6 8. Nd8 , with a win]

5. Nf8 Ne5 6. Kb6 Nc6 7. Kc7! (preventing 7... ♔d6) 7... Nb4

[7... Kc5 loses due to 8. Nd7+ Kd5 9. Ne5! (offering the opponent a choice of two losing captures) 9... Nb4 10. Kb6□]

8. Nd7 Nc6

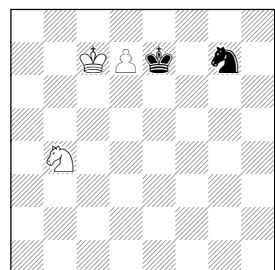
[No better is 8... Na6+ 9. Kb6;

or 8... Kc4 9. Kd6 Na6 10. Nc5 Nb8 11. Kc7□]

9. Ne5! Nb4 10. Kb6 , and White wins.

One may conclude that if a pawn has reached the 7th rank, and the stronger side's king controls the queening square, the win is simple, provided only that there is no immediate possibility of perpetual check. Sooner or later the weaker side ends up in zugzwang and loses.

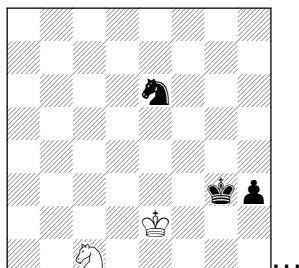
Example 23



Now let us deal with some examples of perpetual check.

Black to play gives perpetual check: 1... Ne8+! 2. Kc8 Nd6+ 3. Kc7 Ne8+ 4. Kc6 Nf6=

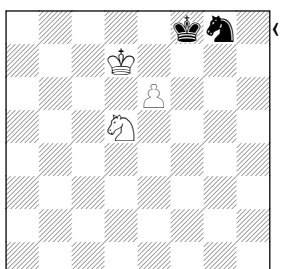
Selezniev Alexei 3



### Conclusion of a study

Here too, White manages to save himself by perpetual check. 1. Kf1 h2 (otherwise 2. ♔g1= would follow) 2. Ne2+ Kf3 3. Ng1+ Kg3 4. Ne2+ Kh3 5. Ng1+ , with a draw, because 5... Kg4 fails due to 6. Kg2=

### Pawn on the 6th or on the 5th rank



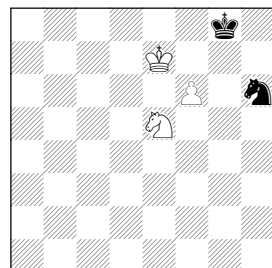
### Pawn on the 6th or on the 5th rank

With a pawn on the 6th rank a win is

much more difficult, because, in addition to perpetual check, the weaker side obtains some extra defensive ideas.

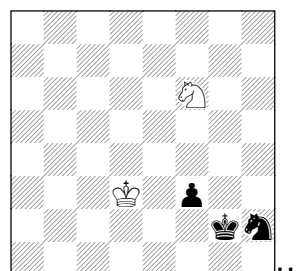
1... Kg7 2. Ke8 Nh6! , and there is no 3. e7 because of 3... Nf5 with a draw.

### Example 24



Black to move draws immediately by the already familiar device, perpetual check: 1... Nf5+ 2. Ke6 Ng7+=

Benko P. - Bronstein D.,1949



1. Ne4 The only move, as 1... f2 was threatened. 1... Ng4 2. Kd2 Ne5 [After 2... Nf6 3. Nxf6 f2 4. Ng4! f1=Q 5. Ne3+ White draws.] 3. Ke3 Nc4+ 4. Kd4 Na3 5. Kd3 Nb5 6. Kd2 Nd4 7. Kd3 Ne6 (threatening ♖c5 or ♖g5) 8. Ke3! Nc7

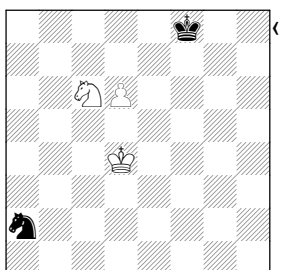
[White defends precisely; on 8... Nc5 or 8... ♖g5 there would follow the simple 9. Nf2=]

9. Kd3 Nd5 10. Kc2 Ne3+ 11. Kd3 Nf5  
12. Kd2 Ng3 13. Nf6! f2

[Also after 13... Kg1 14. Ng4 Nf5 (with the threat of 15... ♖h6 16. ♜e3 ♜g2 17. ♜f2 ♜f5) 15. Ke1! Kg2 (or 15... Nh6 16. Nf2) 16. Nf2 Black achieves nothing]

14. Ng4 f1=Q 15. Ne3+ . Draw.

**Averbakh Yuri L (RUS) 4**



With a pawn on the 6th rank, a win is possible in two cases:

1) if the weaker side cannot stand against coordinated actions of the opponent's pieces;

2) if the weaker side's pieces are cramped, having insufficient room for maneuvering.

The a2-knight is unable to help the king in time. 1... Ke8 2. Kd5 Kd7

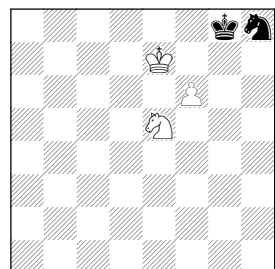
[2... Nc3+ 3. Ke6□]

3. Nb8+! Kc8

[or 3... Kd8 4. Ke6 Nb4 5. d7□]

4. d7+ Kc7 5. Ke6 Nb4 6. Na6+! Nxa6 7. Ke7 , and White wins.

**Cheron A 2**



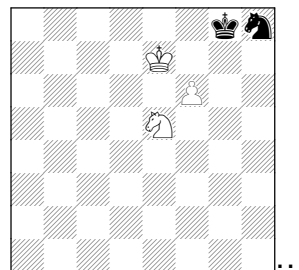
An awkward position of the black knight decides the game. 1... Kh7 2. Kf8 Kh6

3. Kg8 Kg5 4. Kg7 Kf5 5. Nd7 Ng6 6. f7

Now the win is easy. 6... Kg5 7. Ne5

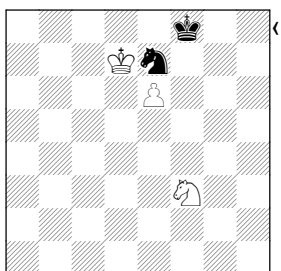
Nf4 8. Kg8 Ne6 9. Nf3+ Kf6 10. Nd4□

**Example 25**



If it is White to move, then after 1. Ke8 the game transposes to the previous example.

**Rogers I. - Belotti B., Mendrisio, 1987**



In this position Black made an instructive mistake.

He played 1... Nf5?

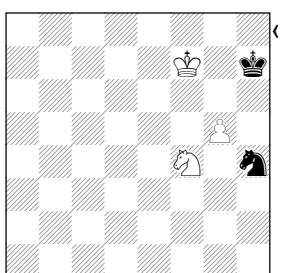
[A simple draw could have been obtained by 1... Nd5 2. Kd8 Kg7=]

Now Black loses by force. 2. Nd4! Ne7 3. Kd8! , and Black resigned. [...]

[If 3... Nd5 , then 4. Nf5! Kg8 5. Ne7+□;

and 3... Ng8 would be met by 4. Nf5 Nf6 5. e7+ (the pawn has advanced to the 7th rank!) 5... Kf7 6. Nd6+ Ke6 7. Ne4 , winning.]

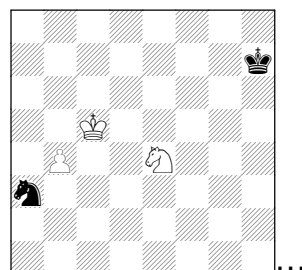
**Cheron A 3**



The farther the pawn is from the promotion square, the less winning chances it gives. As a rule, such positions are drawn.

1... Ng6!=

**Pongracz A**



But if the defender's king is remote, a win may be possible even with a pawn on the 4th rank.

1. Nd2 Kg7 2. Nc4 Nb1

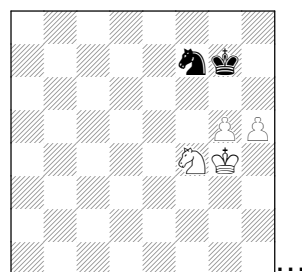
[2... Nc2 does not save either in view of 3. b5 Ne1 4. b6 Nd3+ 5. Kb5 , winning]

3. Kd4!

[But not 3. b5? Nc3 4. b6 Na4+ , with a draw]

3... Kf7 4. b5 Ke7 5. b6 Kd7 6. Kc5 Nc3 7. Ne5+ Kc8 8. Kc6 , and White wins.

**KNIGHT AND TWO PAWNS AGAINST KNIGHT**



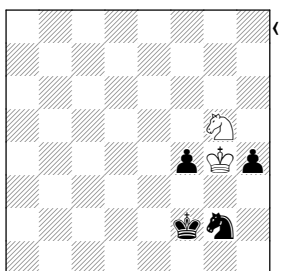
**KNIGHT AND TWO PAWNS AGAINST**

## KNIGHT

A knight with two pawns normally win easily against a knight, no matter if the pawns are connected or not.

1. Ne6+ Kg8 2. g6 Ne5+ 3. Kf5 Nf3 4. h6 Nh4+ 5. Kf6 Nf3 6. Ng5 , and White wins.

Paoli E. - Kovacs P., Hungary, 1971



Black wins easily, precise game supposed. 1... Ke3! 2. Nf3

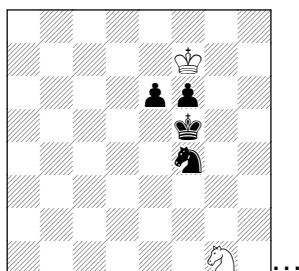
[In response to 2. Kh3 , 2... f3 decides.]

2... h3! 3. Nh2 Kf2 4. Kxh3

[if 4. Nf3 , then 4... Nh4! 5. Nh2 Kg2°]

4... Ne3! 5. Kh4 Kg2 6. Kg5 Kg3! Zugzwang. White resigned.

Taimanov M. - Spassky B., Leningrad, 1952



Exceptions are rare, however they occur. After 1. Nf3!! White saves the game.

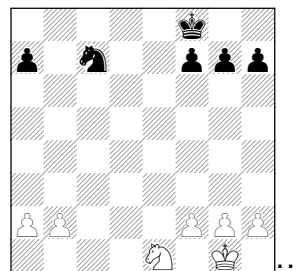
1... Kg4

[If 1... e5 , then 2. Nh4+ Kg5 3. Nf3+ Kg4 4. Kxf6 e4 5. Ne5+ Kg3 6. Nc4 , with a draw;

whereas on 1... Ke4 White plays 2. Nd2+ Kd3 3. Nf1 f5 (or 3... Ke2 4. Kxf6 Kxf1 5. Ke5=) 4. Kf6 followed by 5. ♟g3 threatening 6. ♟f5=]

2. Nh2+ Kh3 3. Nf1 f5 4. Kf6 (with the threat of ♟e3-f5). Draw.

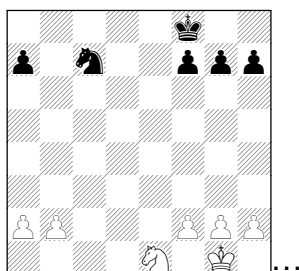
## STRATEGY AND TACTICS IN KNIGHT ENDINGS



## STRATEGY AND TACTICS IN KNIGHT ENDINGS

A knight is a short-range piece, and so in many aspects the knight endings resemble the pawn ones. Hence, the questions discussed while studying the pawn endings are also topical for the knight endings: utilizing a material advantage, triangulation, zugzwang, breakthrough, outside passed pawn, etc. Let us deal with these subjects in detail.

### Utilizing a material advantage



### Utilizing a material advantage

As well as in pawn endings, an extra pawn in a knight ending is almost always sufficient for a win.

A winning plan is simple: exploiting the fact that Black cannot exchange the knights, White improves the positions of his pieces and then creates a passed pawn on the Q-side. Then White's outside passed pawn diverts the opponent's pieces, and White captures the black pawns on the K-side. 1. Kf1 Ke7 2. Ke2 Kd6 3. Kd3 Kc5 4. Nc2 Nd5 5. g3 a5 6. b3 f5 7. a3 g6 8. b4+ axb4 9. axb4+ Kd6 10. Kd4 Nc7 11. f4 Nb5+ 12. Kc4 Nc7 13. Ne3

[13. b5 is also winning.]

13... Kc6 14. Kd4 Kd6 15. Nc4+ Kc6

[Or 15... Ke6 16. Ne5 Kd6 17. Nf7+ Ke7 18. Ng5 h6 19. Nf3 Kf6 20. Kc5 Ne6+ 21. Kd6 g5 22. b5 , and White wins.]

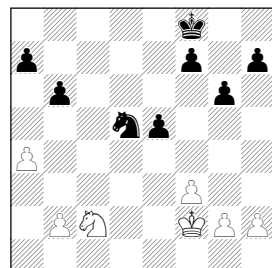
16. Ke5 Kb5 17. Ne3 Na6

[17... Kxb4 18. Nd5+ , with a won pawn

ending]

18. Nd5 Kc4 19. Nf6 h5 20. Nd5 Nb8 21. Ne7 , and White wins.

Fayans - Fine R., New York, 1940



Here too, utilizing an extra pawn is rather simple. 1... Ke7 2. Na3 f6 3. g3 Ke6

First of all Black centralizes his pieces.

4. Ke2 Nb4 5. Nb5 a6 6. Nc3 f5 7. Kd2 Kd6 8. Ne2 Kc5 9. Kc3 Nd5+ 10. Kb3

[10. Kd3 Kb4]

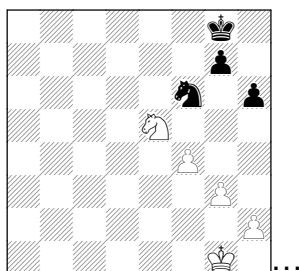
10... g5! 11. h3

[On 11. Kc2 there follows 11... Kb4 12. b3 Ne3+ 13. Kb2 Nf1 14. h3 Nd2 , winning a pawn]

11... h5 12. h4 gxh4 13. gxh4 f4! 14. Kc2 Ne3+ 15. Kd3 Ng2 16. Ke4 Kd6 17. Nc1 Nxh4 18. Nd3 Ng6 19. Kf5 Ne7+ 20. Kg5 Kd5 21. Kxh5 Kd4 , and Black went on to win.

**Knight and three pawns against knight and two pawns on one wing**





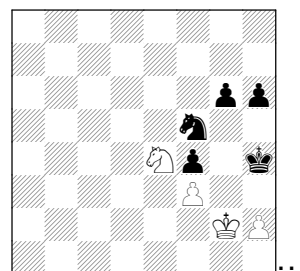
If the pawns are all on one wing, the defender's drawing chances naturally increase. Let us deal with two alignments of forces that occur in practice most often: three pawns vs. two and four pawns vs. three.

Knight and three pawns against knight and two pawns on one wing

As a rule, such positions are drawn due to the limited number of pawns.

An attempt to create a passed pawn leads to pawn exchanges and to a draw, however, White is unable to improve his position without advancing the pawns. The black pawns on g7 and h6 occupy the ideal defensive squares.

**Fine R. - Najdorf M., New York, 1949**



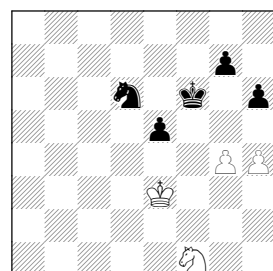
In the game White played 1. h3? , and lost.

[Nevertheless, a draw could have been obtained by 1. Nf2 (it is important to abstain from the weakening of the g3-square) 1... Ne3+ 2. Kg1 Nc2 3. Nd3 g5 4. Kf2 Kh3 5. Kg1 , and Black has achieved nothing.]

1... Ne3+ 2. Kh2 Nc2 3. Kg2 Ne1+ 4. Kf2 Kxh3! 5. Kxe1 Kg2 6. Ke2 h5 7. Ng5 h4 8. Ne6 g5! White resigned, [...]

[because a pawn ending after 9. Nxb5 h3 10. Nxb3 Kxb3 is hopeless. ]

**Guldin L. - Averbakh Y., Baku, 1955**



If the stronger side has a passed pawn, or if he can create it without numerous pawn exchanges, the defense is extremely difficult.

1... g5! It is essential to fix the white

pawns. 2. h5

[Bad is 2. h5 3. Kxg5 4. Kf3 (or 3. Nh2 e4 4. Kd4 Kf4 5. Nf1 Nb5+ 6. Kc5 e3 7. Nxe3 Kxe3 8. Kxb5 Kf3 9. Kc4 Kxg4 10. Kd3 Kf3 , winning) 3... e4+ 4. Kg3 Nc4! 5. Nh2 Nd2 6. Kf2 Kf4 7. Ke2 Kg3 , and Black wins]

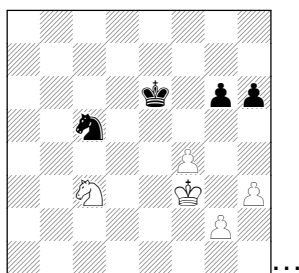
2... Ke6 3. Kd3 Kd5 4. Ne3+ Kc5 5. Nc2 [5. Nf5 loses after 5... Nxf5 6. gxf5 Kd5 7. Ke3 g4°]

5... e4+ 6. Ke3 Kc4! [The immediate 6... Kd5 fails due to 7. Nb4+ Ke5 8. Nc6+ , and the white knight becomes dangerous.]

7. Nd4 Kd5! 8. Ne2 [8. Nf5 does not save due to 8... Nxf5+ 9. gxf5 Ke5 10. f6 Kxf6 11. Kxe4 Ke6 12. Kf3 Ke5 13. Kg4 Ke4 , with an easy win.]

8... Nc4+ 9. Kf2 Ne5! 10. Kg3 Kc4 , and Black wins.

Yuferov S. - Shchekachev A., Moscow, 1988



Unlike in the game V. Zavada - A. Panchenko, the black pawn is on g6, which allows White to create a passed pawn, obtaining good winning chances.

1. Ke3 First White improves his position. 1... Nd7 2. Ne4 Nb6 3. g4

Nd5+ 4. Kf3 Ne7 5. Ng3 Kd5 6. Ke3 (zugzwang) 6... Ng8

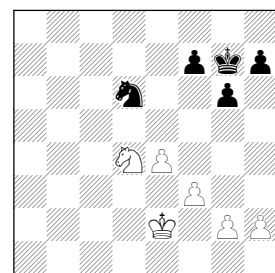
[Or 6... Ke6 7. Ke4 followed by 8. f4-f5] 7. Ne4 Ne7 8. Nc3+ Kc4 (otherwise 9. f4 would follow) 9. Nd1 Kd5 10. Kd3 Ng8 11. Ne3+ Ke6 12. Kd4 White is ready to create a passed pawn. 12... Nf6

[Or 12... Ne7 13. Ke4] 13. f5+ gxf5 14. gxf5+ Kd6 15. Ng4 Ng8 16. Ke4 Ke7 17. Ke5 Kf7 18. h4! h5

[This is forced, because after 18... Ke7 19. f6+ Kf7 20. h5! the black knight is trapped]

19. Nf2 Now White wins by exploiting the weakened g5-square. 19... Ne7 20. Ne4 Nc6+ 21. Kf4 Nd4 22. Ng3 Kg7 23. Nxh5+ Kh6 24. Ng3 , and White has obtained an easily won position with two extra pawns.

Knight and four pawns against knight and three pawns on one wing



Knight and four pawns against knight and three pawns on one wing

As a rule, such endings are won. The

winning plan is typical: threatening to exchange knights, the stronger side step by step improves the positions of his pieces and creates a passed pawn. Then, by coordinated actions of the king and the knight, the pawn is advanced and queened. It is important that a knight exchange leads to a won pawn ending. These endings were studied by the American grandmaster Reuben Fine.

1... Kf6 2. g3 Ke5 3. Nc6+ Ke6 4. Ke3

Here Fine examines three main continuations: 4... Kd7

[4... f5 (intending to exchange as many pawns as possible) 5. Nd4+ (not so good is 5. e5 Nf7 6. f4) 5... Kf6 (if 5... Ke7, then 6. e5 Nc4+ 7. Kf4 h6 8. h4 Nb2 9. Nxf5+! gxf5 10. Kxf5 Kf7 11. f4 Nd3 12. h5 Nf2 13. g4 Nh3 14. g5, and White wins) 6. exf5 gxf5 7. Kf4 Kg6 8. Ke5 Nf7+ 9. Ke6 Nd8+ 10. Ke7 Nb7 11. Ne6! Pointed out by Yury Averbakh (not so clear is the line given by Fine: 11. f4 Nc5 12. Nf3 Kh5 13. Ne5 because of 13... h6! 14. Kf6 Ne4+ 15. Kxf5 Nxc3+!) 11... Na5 12. Nf4+ Kg5 13. h4+ Kh6 14. Kf6, and White wins;

4... g5 5. Nd4+ Kf6 6. f4! gxf4+ 7. gxf4 Nc4+ 8. Kf2! Kg7 9. e5 Kg6 10. Ke2 Nb2 11. Kf3 Nc4 12. Ke4 Nd2+ 13. Kd5 Nf1 14. f5+ Kg5 15. e6! fxe6+ 16. Kxe6 Nxe2 17. f6, and the pawn queens (analysis by R.Fine)]

5. Nd4 f6 6. f4 Ke7 Black is condemned to wait passively. 7. h4! Nf7 8. g4 (seizing space) 8... Kd7 9. Kd3 Ke7 10. Kc4 Kd6

[10... Nd6+ 11. Kd5]

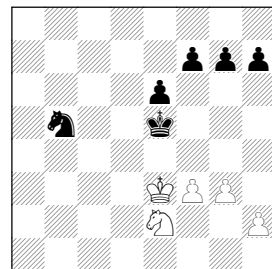
11. g5! fxg5 12. hxg5 Ke7

[On 12... h6 there follows 13. e5+ Ke7 14. gxh6 Nxe6 15. Kd5 Ng4 16. Nc6+

Ke8 (or 16... Kd7 17. e6+ Ke8 18. Kd6 Nf6 19. Nb4 Ne4+ 20. Ke5 Nf2 21. Nd5 Ng4+ 22. Kd6, winning) 17. Ke6 Ne3 18. Nb4 Ng2 19. Nd5, and White wins the g6-pawn]

13. e5 Nd8 14. Kd5 Nf7 15. Nc6+ Ke8 16. e6 Nh8 17. Ke5 Kf8 18. Kf6, and White wins;

Ilivitzki G. - Geller E., Tbilisi, 1949



Let us deal with two practical examples.

1... Nd6 2. Nc1 Nf5+ 3. Kf2 Kd5 4. Nd3 e5 5. Nb4+ Kc5 6. Nd3+ Kd4 7. Ke2 Ne7

Step by step Black improves his position. 8. Nc1 f5 9. Nb3+ Kc4 10. Nd2+ Kc3 11. Nb1+ Kd4 12. Nd2 Nc6 13. Nb3+ Kc4 14. Nd2+ Kc3 15. Nb1+ Kd4 Time after time Black wins a tempo by using triangulation. 16. Na3 e4 17. f4

[Better is neither 17. Nb5+ in view of 17... Kc5 followed by 18... ♖d4 and 19... ♗f3;

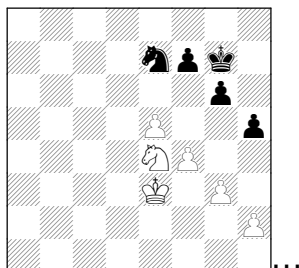
nor 17. fxe4 fxe4, and White is in trouble.]

17... Kc5 18. Ke3 Nb4 19. h4 Despair, but White's position is hopeless anyway.

19... Nd5+ 20. Kd2 Nf6 21. Ke3 Kb4 22. Nc2+ Kc3 23. Na3 Nd5+ 24. Ke2 Kb3 White resigned, [...]

[on 25. Nb5 or 25. ♖b1 there follows 25... Nc3+]

Taimanov M. - Stahlberg G., Zurich, 1953



Instead of creating a passed pawn along the e-file, which involves pawn exchanges, White opts for another plan.

1. Kf3 Kf8 2. Nd6 Nc6 3. Ke4 Ke7 4. f5! (the only way) 4... Nb4

[After 4... gxf5+ 5. Nxf5+ Kf8 6. Nd4 Ne7 7. h4! Kg8 8. Kf4 the h-pawn is doomed.]

5. f6+! (the final squeeze) 5... Kf8

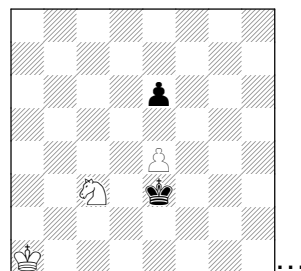
[5... Ke6 6. Nb7! winning]

6. Nb7 Na6 7. Kd5 Nc7+ 8. Kd6 Nb5+ 9. Kd7 Nd4 10. Nc5 Nf5 (11. e6 was threatened) 11. Kd8 Nd4 12. Nd7+ Kg8 13. Ke8! Ne6 14. Ke7 g5

[Zugzwang. Now if 14... Nd4, then 15. Nc5 followed by 16. e6]

15. Ke8 Nc7+ 16. Kd8 Ne6+ 17. Ke7 (triangulation) 17... Nd4 There is no escape. 18. Nc5 Nc6+ 19. Kd6 Na5 20. e6! fxe6 21. Ke7! Nc6+ 22. Ke8 Ne5 23. Nxe6 Nf7 24. Ke7 g4 25. Ng7 Black resigned.

Corresponding squares, triangulation, zugzwang



Corresponding squares, triangulation, zugzwang

White has the only way to a win. 1. Ka2! A typical case of corresponding squares: d2 and b2 correspond, as do d3-b3 and e3-a2.

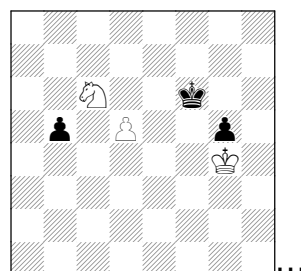
[After 1. Kb2 Kd2! Black draws.]

1... Kd3 2. Kb3! Kd4 3. Kb4 Kd3

[Or 3... e5 4. Kb5! Kxc3 5. Kc5, winning.]

4. Kc5! Kxc3 5. Kd6 Kd4 6. e5, and White wins.

Reti R. - Marshall F., Baden Baden, 1925

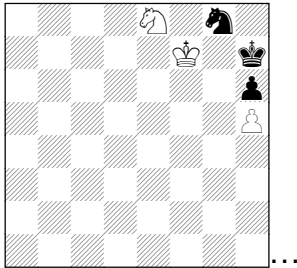


In the two following examples White wins by means of "triangulation".

In order to win, White must give the move to Black ("triangulation" on g3-f3-g4). 1. Kg3 Kf5 2. Kf3! Kf6 3.

Kg4 , and White wins

**Bron V**

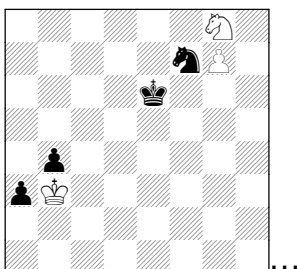


1. Ke6!

[A knight's transfer to f8 does not work due to 1. Nc7 Kh8 2. Ne6 Kh7 3. Nf8+ Kh8 , and White has achieved nothing. He has to gain (or to lose) a tempo, and the knight will get to f8 without a check. This can be done by means of triangulation on the squares e6, d6, and d7.]

1... Kh8 2. Kd7 Kh7 3. Kd6 Kh8 4. Ke6! Kh7 5. Kf7 Kh8 6. Nc7 Only now the knight is transferred to f8. 6... Kh7 7. Ne6 Kh8 8. Nf8 Zugzwang. White wins.

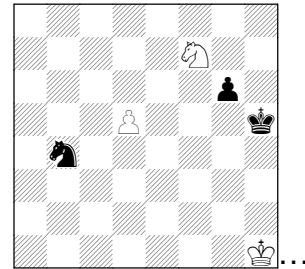
**Liburkin M**



After 1. Ka2! Black ends up in zugzwang and loses. [...]

[For example, 1... Kd6 2. Ne7! Nh6 3. Nf5+ □; or 1... Ke5 2. Nf6! Nh6 3. Ng4+ , and White wins.]

**Kaminer S**

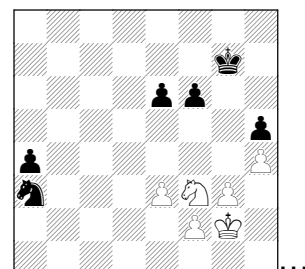


It seems that the draw agreement will follow soon, however, by putting Black in zugzwang, White wins. 1. d6 Nc6 2. d7 Kh4

[Or 2... g5 3. Kh2!]

3. Kh2! (the only way) 3... g5 4. Kg2 g4 5. Kh2 g3+ 6. Kg2 Kh5 7. Kxg3 (zugzwang) 7... Kg6 8. Ne5+ , winning.

**Outside passed pawn**



Outside passed pawn

In knight endings an outside passed pawn is of great importance, the same way as it is in pawn endings. It is worthy to note that this pawn does not require protection, because a weaker side's knight is unable to win it without king's support.

Bogoljubow proves that White's position is extremely difficult. 1. Nd4 Kf7 2. Kf3 e5 3. Ne2 Nb1! (taking control of the important d5-square) 4. Ke4 a3 5. Nc1 Nc3+ 6. Kd3 a2 7. Nb3 Na4! 8. Na1 Nc5+

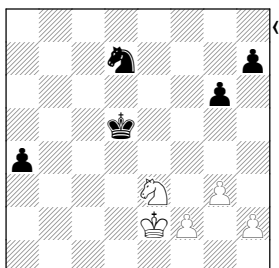
The white knight is tied to the a-pawn, so Black begins actions on the K-side, where he has an extra piece. 9. Ke2 Ne4! 10. Kf3 f5 11. Kg2 Nd2! (threatening to "freeze" the white K-side by 12... e4) 12. f3 e4 13. fxe4 Nxe4! (the simplest) 14. Kf3 Kf6 15. Kf4 Nc5 16. Nc2

[If 16. Kf3, then 16... Ke5°]

16... Nd3+, and White resigned, [...]

[because on 17. Kf3 there would follow 17... Ne1+]

Schmidt V. - Kasparov G., Dubai, 1986



White has drawing chances because of the small number of pawns on the board; nevertheless, by exact play Kasparov

converts his advantage into a win. 1... Kd4 2. Kd2 (otherwise 2... c3° would follow) 2... Ne5 3. Kc2 Nd3 4. Nd1 Ne1+ 5. Kb2 Here the king keeps an eye on the a-pawn.

[No better is 5. Kd2 due to 5... a3! 6. Kxe1 a2 7. Ne3 a1=Q+°]

5... Nf3 6. h4 Ne5 7. Ka3 Ke4 The white pawns are defenseless. 8. h5?! (the last chance) 8... gxh5! 9. Nc3+ Kf3 10. Nd5 Ng4!

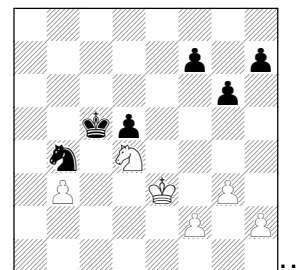
[But not 10... Kxf2 in view of 11. Nf4!]

11. Ne7

[In response to 11. Nf4 Black wins by 11... h4! 12. Nh3 Nxf2 13. Nxf2 (or 13. Ng5+ Kxg3 14. Nxh7 h3°) 13... Kxf2 14. gxh4 h5! 15. Kxa4 Kg3°]

11... Nxf2 12. Nf5 Ne4 13. Kxa4 Nxg3 14. Nh4+ Ke4 15. Kb4 Nf5°

Barcza G. - Sanchez



Black is much worse: he cannot exchange the knights, because the pawn ending is hopeless. White exploits this in order to reinforce his position. 1. h4 Kd6 2. g4 Kc5 3. f4 Kd6 4. Nf3 f6 Black is forced to weaken his position. 5. Nd4 Na6

[Worse is 5... Kc5 due to 6. Ne6+ Kd6

7. Nf8 , winning a pawn.]

6. Nc2 Kc5 7. Kd3 Nc7 8. b4+ Kb5 9. Kc3 Kc6 10. Nd4+ Kd6 11. Kd3 Ne8 12. f5! gxf5 (otherwise White creates a passed pawn on the h-file after 13. fxg6 hxg6 14. h5□) 13. Nxf5+ Ke5 14. b5 Nc7

[14... h5? 15. b6□]

15. b6 Na6 16. Ke3 Nc5

[On 16... h5 there would follow 17. Kf3 hxg4+ (17... d4 18. b7) 18. Kxg4 d4 19. h5 d3 20. h6 d2 21. Ne3 f5+ 22. Kg5 , winning]

17. h5 Nb7 18. Nd4 Kd6 19. Nb3 Kc6

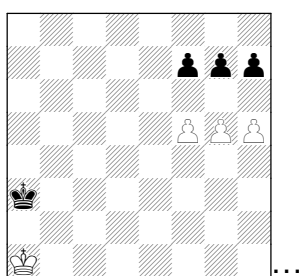
[If 19... Ke5 , then 20. h6!]

20. Kd4 Kd6 21. Nc1 Nd8 22. Nd3 Nc6+ 23. Ke3 Ne7 24. Nb4 h6

[Bad is 24... Kc5? 25. b7 , winning]

25. Kd4 (threatening 26. ♔d5 ♔d5 27. b7, and the pawn queens) 25... f5 26. g5 f4 27. gxh6 Nf5+ 28. Kd3 Nxh6 29. Nxd5 . Black resigned.

## Breakthrough



## BREAKTHROUGH

A pawn breakthrough involves a sacrifice of one or several pawns in order to create

a passed pawn. This device often occurs in practice, and so in the course of play it is very important to foresee the possibility of a breakthrough.

As a rule, three factors contribute to a breakthrough.

I. Pawns are close to the queening square (in other words, extra space).

II. The opponent has doubled pawns.

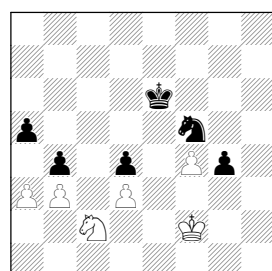
III. The pawns hinder its own king to catch the opponent's pawn.

I. Pawns are close to the queening square His far advanced pawns allow White to promote one of them by a breakthrough. 1. g6! fxg6

[Or 1... hxg6 2. f6 gxf6 3. h6□]

2. h6! gxh6 3. f6□

Pavlov M. - Polgar Z.,1984



Black has a passed pawn on the K-side; after his breakthrough on the Q-side he creates another passed pawn, which decides the game. 1... a4 2. axb4



[2. bxa4 b3°]

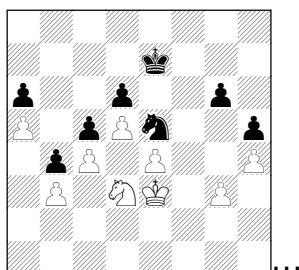
2... axb3 3. Na3 b2 4. b5 Kd5 5. b6 Kc6  
6. Kg2 Ne3+

[But not 6... Kxb6? 7. Nc4+=]

7. Kg3 Kxb6 8. f5 Kc5 9. Kf4 Nxf5! White  
resigned. [...]

[After 10. Kxg4 Ne3+ 11. Kf4 Kb4 12.  
Nb1 Kb3 13. Ke4 Ka2 14. Nd2 Nf1! the  
b-pawn is queening.]

Razuvaev Y. - Ostojic P., Berlin, 1988



It may seem that White is unable to win,  
but... 1. g4!

[After 1. Nxe5 dxe5 the pawn ending is  
drawn;

in response 1. Nf2 Kf6 2. Kf4 Kg7 3. g4  
hgx4 4. Nxg4 Black finds 4... Nxc4!]

1... Nxg4+

[If 1... hxg4 , then 2. Nxe5 dxe5 3. Kf2 ,  
winning;

after 1... Nxd3 2. Kxd3 hxg4 3. Ke3 Kf6  
4. Kf4 decides;

1... Kf6 does not save Black either in  
view of 2. gxh5 gxh5 3. Nf4 Ng4+ 4.  
Kd2 Ke5 5. Nxh5 Kxe4 6. Ng7 followed  
by e8-c7-a6]

2. Kf4 Nf6

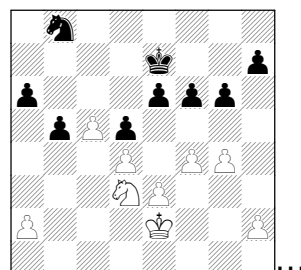
[Or 2... Kf6 3. e5+! Nxe5 (3... dxe5+

would be met by 4. Kf3 g5 5. hxg5+  
Kxg5 6. Nxc5 h4 7. d6 , and White  
wins) 4. Nxe5 dxe5+ 5. Ke4 g5 6.  
hxg5+ Kxg5 7. Kxe5 , and the d-pawn  
will queen with a check.]

3. e5 dxe5+ 4. Nxe5 Kd6 5. Nxg6 Nxd5+  
6. cxd5 c4 7. Ke4 Black resigned. [...]

[On 7... cxb3 there would follow 8. Ne5  
b2 9. Nc4+]

Pillsbury H. - Gunsberg I., Hastings, 1895



Now let us examine a masterpiece by the  
great American player Harry Pillsbury.

1. f5! (otherwise Black plays 1... e6) 1...  
g5

[Bad is 1... gxf5 2. gxf5 exf5 due to 3.  
Nf4 , winning the d5-pawn]

2. Nb4 a5 3. c6!! Kd6

[3... axb4 4. c7]

4. fxe6! Nxc6 The only move.

[4... axb4 loses immediately after 5. e7  
Kxe7 6. c7]

5. Nxc6 Kxc6 6. e4! dxe4 7. d5+ Kd6 8.  
Ke3 , and White won the pawn ending  
after 8... b4 9. Kxe4 a4 10. Kd4 Ke7

[10... f5 11. gxf5 g4 12. f6]

11. Kc4 b3 12. axb3 a3 13. Kc3 f5 14.  
gxf5 g4 15. b4 h5 16. b5 a2 17. Kb2

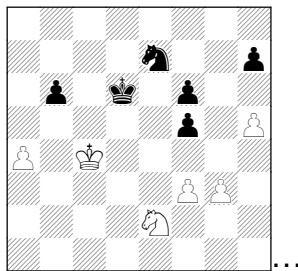


a1=Q+ 18. Kxa1 h4 19. b6 g3 20. d6+!  
Kxd6

[or 20... Kf6 21. d7 Ke7 22. b7 g2 23.  
d8=Q+ Kxd8 24. b8=Q+□]

21. b7 Kc7 22. e7 g2 23. b8=Q+ Kxb8 24.  
e8=Q+□

#### Pawn weaknesses



#### Pawn weaknesses

In knight endings, the pawn weaknesses are more serious factor than in pawn endings, because they can be attacked not only with the king, but also with the knight.

First of all White should tie the black pieces to the defense of his weak pawns.

1. Kb5 Nd5 2. f4! (fixing the weak pawns on f5 and f6) 2... Kc7 3. Nd4 Nc3+ 4. Kb4 Nd5+ 5. Kc4 Ne7 6. Kb5 Kb7 7. Ne6! Nc8

[If 7... Nc6 , then 8. Ng7 Ne7 9. Ne8 Ng8 10. Nd6+ Kc7 11. Nxf5]

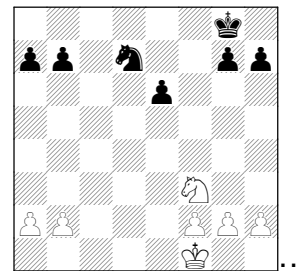
8. Kc4 Nd6+ 9. Kd5 Ne4 10. h6! Nf2

[Black avoids 10... Nxf3 , since after 11. Nf8 Ne2 12. Nxf7 Nxf4+ 13. Kd4 Ng6 14. Nxf6 Kc6 15. h7 White wins

easily.]

11. Nf8 Ng4 12. Ke6 Nxf6 13. Kxf6 Ka6 14. Kg5 Ng8 15. Kxf5 Ka5 Black's counterplay is far too late. 16. Nd7! Kxa4 17. Nxb6+ Kb5 18. Nd5 Kc6 19. Ke6 Nh6 20. Nf6 Black resigned.

Timman J. - Ree H., Amsterdam, 1984



One may estimate this position as 6:4 - Black has a weak pawn at e6, and White plays for a win without any risk. 1. Ng5 Nc5

[After 1... e5 Black seriously weakens the light squares.]

2. b4 Na6

[After 2... h6 3. bxc5 hxg5 Black loses, for example: 4. Ke2 Kf7 5. Kf3 Kf6 6. Kg4 Kg6 7. f3! Kh6 8. f4 gxf4 9. Kxf4 Kg6 10. Ke5 Kf7 11. h4 , and the outside passed pawn decides.]

3. a3 Nc7 4. Ke2 h6

[Much better is 4... Nb5 with good drawing chances.]

5. Ne4 Kf8 6. Nd6 b6 7. Kd3 a6 8. Nc4 Nd5 9. Kd4 Ke7 10. g3 Kd7 11. f4 Kc6 12. Ke5 Nc7 13. Nd6 Kd7 The last moves were forced. 14. f5! White exchanges the opponent's weak pawn, but now his king's activity becomes a

decisive factor. 14... exf5 15. Nxf5 Ne8 16. g4 Nf6 17. h3 h5 The alternatives are not better. 18. g5 Nh7 19. h4 Nf8 20. Nxg7 Ng6+ 21. Kf6 Nxh4 22. Nxh5 Kc6 23. Ng3 Kd5 24. a4!

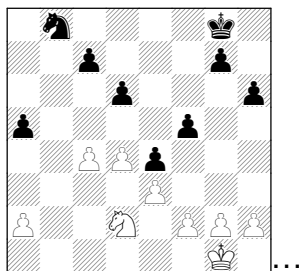
[Not the immediate 24. Nf5 due to 24... Ng2]

24... b5 25. a5 Kc4

[Black is in zugzwang, and so he is forced to cede the e5-square; 25... Kd4 or 25... d6 would be met by 26. Nf5+]

26. Nf5 Ng2 27. Ke5 The pawn is unstoppable, so Black resigned.

Alekhin A. - Znosko-Borovsky E., Birmingham, 1926



White has a clear advantage: he does not have any weaknesses in his camp; at the same time, the a5-pawn is weak and may become a target for attack; the advanced e4- and -f5 pawns are also vulnerable in view of the eventual f2-f3 and g2-g4.

1. Kf1 Nd7

[An immediate king approach is better: 1... Kf7 2. Ke2 Ke7 3. Kd1 Kd7 , and White cannot win the a5-pawn after 4. Kc2 Kc6 5. Kb3 Kb6 6. Ka4 Nd7 7. Nb3 Ka6 8. Nxa5? due to 8... Nb6+ 9. Kb4 c5+ So, in this case White would be forced to carry out the plan of

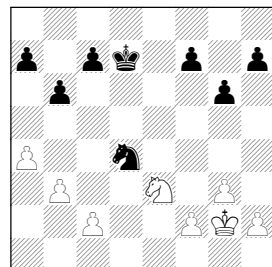
undermining the black pawns with either f2-f3 or g2-g4.]

2. Ke2 Nb6 3. Kd1 a4 Black intends to block the Q-side by c7-c5; White prevents this advance, fixing the c-pawn. 4. d5! Nd7 The only opportunity of counterplay is to attack the white K-side pawns. 5. Kc2 Ne5 6. Kc3 Ng4 7. Kb4 Nxf2 8. Kxa4 f4 Here the black king's transferring to the Q-side does not save Black - it is too late. 9. exf4 e3 10. Nf3 Nd3 11. Kb5! g5

[No better is 11... e2 12. a4 e1=Q 13. Nxe1 Nxe1 14. a5 , and the pawn queens]

12. fxg5 hxg5 13. a4 e2 14. h3! Nc5 15. a5 Nb3 16. Ne1 Nd4+ 17. Ka4 , and Black resigned.

Active king



Active king

In knight endings, as well as in all other kinds of endings, an active king position is of great importance.

Unlike its white counterpart, the black king comes quickly into play. 1... Kd6

2. h4 Kc5 3. Kf1 Kb4 4. Ke1 Kc3 The difference in kings is noticeable. 5. Kd1 c6 With every move Black improves his position. 6. Kc1 Nf3 7. Nc4 f5! 8. Nb2 f4 9. Nc4

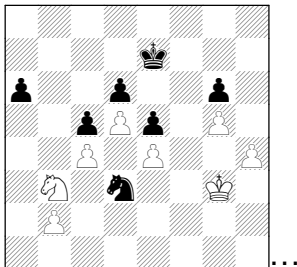
[9. Nd1+ Kd4]

9... Nd4 10. Ne5 fxg3 11. fxg3 c5 12. a5 Nxc2 In addition to his positional advantage Black gains the material. 13. axb6 axb6 14. Nd7 Nd4 15. Nxb6 Ne2+! Black does not hurry to capture the doomed b3-pawn. 16. Kd1 Nxc3 17. Nd7 Kb4! 18. Kc2 Nf5 19. Nf8 Nxe4 20. Nxe7 Nf3 21. Nf6 Nd4+ 22. Kd3

[No better is 22. Kb2 Nxb3 23. Nd5+ Kc4 24. Nb6+ Kb5°]

22... Kxb3 23. Nd7 Ne6 24. Ne5 g5 White resigned.

Junge K. - Veil V.,Warszau,1942



Using his active king, White quickly obtains a decisive advantage. 1. h5! gxh5 2. Kh4 Nxb2

[Black could have retained drawing chances after 2... Nf4, for example: 3. Na5 Kd7 4. Nc6 Ke8 5. b3 Kf7]

3. Na5 Kf7 4. Kxh5 Kg7 5. g6 Nd3 6. Nb7 Nf4+ 7. Kg5 Nxc6 8. Nxd6 Despite the equal number of pawns, the white king is

much more active, and this decides.

8... Ne7

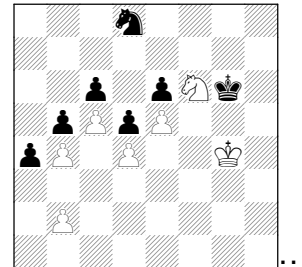
[8... a5 does not help due to 9. Kf5 a4 10. Nb5 Kf7 11. d6!, winning]

9. Nb7 Nc8 10. Kf5!

[This is stronger than 10. Nxc5]

10... Nb6 11. Na5 Kf7 12. Kxe5 Ke7 13. Kf5 Kd7 14. e5 Nc8 15. Kf6, and White went on to win.

Space



Space

The player who possesses more space has a steady advantage and can gradually improve the positions of his pieces.

White has a great spatial advantage, and, exploiting the black knight's passive stance, he reinforces his position. 1. Nh5! (with the idea of 2. ♠f4) 1... Kh6

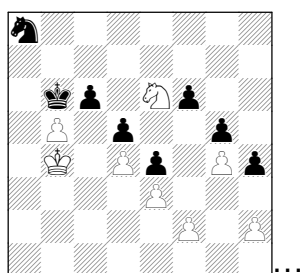
[1... Nf7 2. Nf4+]

2. Nf4 Black is in zugzwang - his king has to retreat. 2... Kg7 3. Kh5 Kh7 4. Kg5 Kg7 5. Nh5+ Kf7 6. Kh6 Nb7 7. Nf4 Nd8 8. Nh3! Nb7 9. Ng5+ Ke7 10. Kg6 Nd8

[An attempt to break loose from White's grip by the knight sacrifice 10... Na5 does not work because of 11. bxa5 b4 12. a6 a3 13. bxa3 b3 14. a7 b2 15. a8=Q b1=Q+ 16. Kg7 , and White wins.]

11. Kg7 (tightening the ring of encirclement) 11... Nb7 12. Nf3 Nd8 13. Nh4 Nb7 14. Ng6+ Kd7 15. Kf6 Na5 16. Nf8+ Kc8 17. Nxe6 Nc4 18. Ng7 Nxb2 19. e6 a3 20. e7 a2 21. e8=Q+ Black resigned.

Verlinsky V. - Gotgilf S., Moscow, 1925



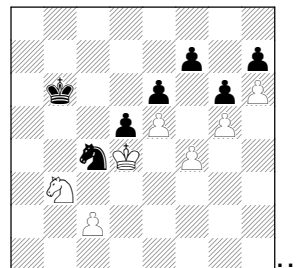
Here White played 1. Nc5?! , which has led to a quick draw.

[Stronger would have been 1. bxc6! Kxc6 2. Ka5! (fighting for space) 2... Nb6 3. Nd8+ Kc7 4. Kb5! with good winning chances, for example: 4... Nc4 (or 4... Nd7 5. Ne6+ Kd6 6. Ng7 , and Black's defense is very difficult) 5. Nf7 Nb2 6. Kc5 Nd3+ 7. Kxd5 Nxf2 8. Ke6 , winning (analysis by Svetlana Prudnikova).]

The game continued: 1... cxb5 2. Nd7+ Kc6 3. Nxf6 Nc7 4. Nh7 Ne6 5. Ka5 h3! 6. Kb4 Kb6 7. Nf6 Kc6 8. Ka5 Nf8 9. Kb4 Ne6 10. Ng8 Nf8= (threatening g6-h4-f3

or h7-f6)

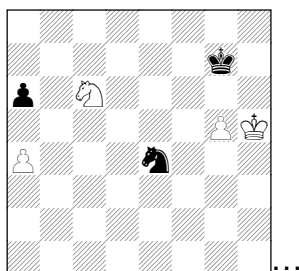
Salo - Kuper I.



An active king is not the only factor that secures a spatial advantage - it is often ensured by the far advanced pawns, the same way as it is in pawn endings. The following example is illustrative.

White's king is not very active; but he possesses more space thanks to his advanced pawns at g5 and particularly h6. White accurately realizes his advantage. 1. Kd3 Kb5 2. Nd4+ Kc5 3. Nf3 (threatening f3-h2-g4) 3... Nb6 4. Nh2 Nd7 5. Ng4 Kb4 6. Kd4 Kb5 7. Ne3 Nb6 8. Ng4 Nd7 9. Ne3 Nb6 10. f5! Breakthrough - as we have already stated, far advanced pawns contribute to it. 10... gxf5 Otherwise, after 11. fxf6 fxf6, White transfers his knight to f6. 11. Nxf5 exf5 12. e6! fxe6 13. g6 e5+ 14. Kd3 hxg6 15. h7 Black resigned.

Ulibin M. - Kontic, Tunha, 1989



A win is rather difficult due to the limited material, however, the young player manages to exploit his extra pawn in a very instructive way. 1. a5! (exactly the same device as in pawn endings) 1... Ng3+

[The strength of 1. a5 reveals itself in the following lines: 1... Kh7 2. Nd4 Ng3+ (or 2... Nd6 3. g6+ Kg7 4. Ne6+ Kf6 5. Nc7! Kg7 6. Nxa6 Nc4 7. Nc7 Nxa5 8. Ne8+ Kf8 9. g7+ Kf7 10. Kh6 Nc6 11. Kh7 Ne7 12. Nd6+ Kf6 13. Nc8□) 3. Kg4 Ne4 4. Kf5 Nd6+ 5. Ke5 Ne8 6. Kd5 Kg6 7. Nf3 Kf5 8. Kc6 Kf4 9. Kb6 Kxf3 10. Kxa6 Kf4 11. Kb6 Kxg5 12. Kc6! ("shoulder-charging!"), and White wins.]

2. Kg4 Ne4 3. Ne7! Kf7 4. Nd5 Kg6 5. Nf4+ Kf7 6. g6+!

[Exact play is required; only a draw results from 6. Nh5? due to 6... Nxc5! 7. Kxc5 Ke7]

6... Kg7 7. Kf5 Nd6+ 8. Kg5 Ne4+ 9. Kg4 Kh6

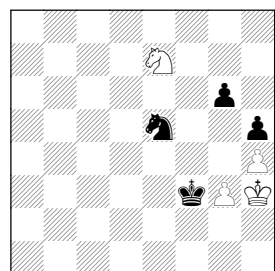
[Or 9... Kg8 10. Kh5!]

10. Kf5 Nd6+ 11. Ke6 Ne4 12. Kd5 Nc3+ 13. Kc6 Na2 14. Kc5! , and Black resigned [...]

[On 14... Kg7 there would follow 15. Ne2! Kxc6 16. Kc4 , trapping the knight.]

We have dealt with the ideas common for pawn and knight endings. Now let us deal with two ideas that are inherent only for knight endings and essential for understanding them.

#### Coordinated actions of king, knight and pawn(s)

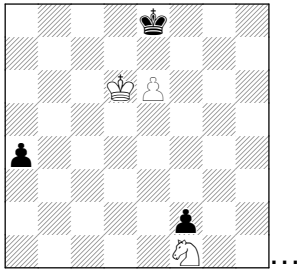


#### Coordinated actions of king, knight and pawn(s)

As a rule, coordinated actions of pieces allow either to mate the opponent's king, or to create a mate threat, which lets win or save in a difficult position, with a number of pawns on the board being unimportant.

The white king is restricted by its own pawns, and Black's king and knight create a mating net around it. 1... Ng4! 2. Nxc6 Other moves do not save either. 2... Kf2 3. Nf4 Kg1 4. Nd3 Kh1 , and any knight move would be met by 5... ♔f2#.

Philidor D. - Boudler, London, 1749



Only coordinated actions of all White's pieces allow to achieve a draw. 1. Ne3 a3! 2. Nd5!

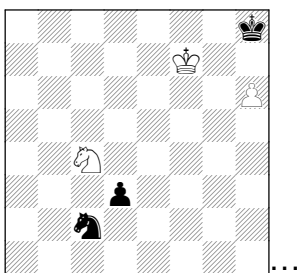
[2. e7? loses due to 2... f1=Q! 3. Nxf1 a2°]

2... f1=Q 3. Nc7+ Kf8!

[In the case of 3... Kd8? White even wins: 4. e7+ Kc8 5. e8=Q+ Kb7 6. Qa8+ Kb6 7. Nd5+ Kb5 8. Qc6+ Ka5 9. Qb6+ , mating.]

4. e7+ Kg7 5. e8=Q Qf8+ 6. Qxf8+ Kxf8 7. Ne6+ , with a draw.

Nietzl F



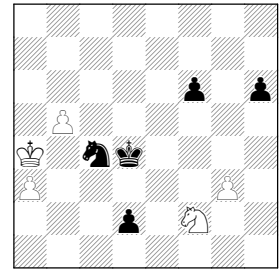
1. Kg6! d2 2. Nd6!

[But not 2. Nxd2? Nd4 , and the black knight reaches f8 in time, parrying all the threats.]

2... d1=Q 3. Nf7+ By coordinated actions of all his pieces White is mating.

3... Kg8 4. h7+ Kf8 5. h8=Q+ Ke7 6. Qf6+ Ke8 7. Qe6+ Kf8 8. Ng5! Qd3+ 9. Kh6 , and mate is unavoidable.

Sanson - Estevez,Sagua,1990



1... Nb2+! 2. Kb3

[2. Ka5 loses right off due to 2... Ke3 3. b6 Kxf2 4. b7 d1=Q 5. b8=Q Qa4+ 6. Kb6 Qb3+°; or 2. Kb4 Nd3+°]

2... Ke3! (concentrating all forces around the d2-pawn) 3. Kc2 Nc4!

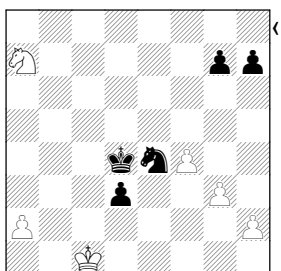
[Surely, not 3... Kxf2? 4. Kxd2 Nc4+ 5. Kd3 Nxa3 6. b6 , and it is White who wins.]

4. Nd1+ (the only move) 4... Ke2 5. Nc3+

[Or 5. a4 Na3+ 6. Kc3 Kxd1 7. b6 Kc1 8. b7 d1=Q 9. b8=Q Qd2+ 10. Kb3 Qb2#]

5... Ke1 6. a4 Ne3+ 7. Kd3 Nd5! White resigned.

Barcza G. - Simagin V.,Moscow,1949



The following ending is a classic example of the coordination of pieces.

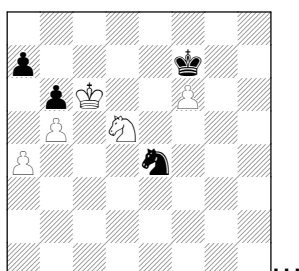
White is powerless to stand against the three perfectly coordinated black pieces. 1... Nd6! (depriving the white knight of the important b5-square) 2. Kd2

[No better is 2. Nc6+ Kc3! 3. Ne7 d2+ 4. Kd1 Ne4 5. Nd5+ Kc4 6. Nb6+ Kd3 , with unavoidable mate.]

2... Nc4+ 3. Kc1 d2+ 4. Kc2 Ke3 5. Nb5 Na3+! White resigned. [...]

[After 6. Nxa3 Black is winning by 6... Ke2°]

#### A knight sacrifice in knight endings



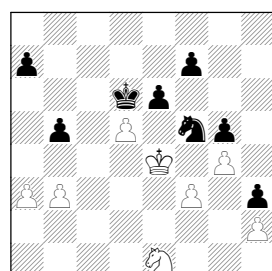
#### A knight sacrifice in knight endings

A knight sacrifice is one of the typical

devices in knight endings. We have already seen a diverting knight sacrifice in knight and pawn vs. knight endings, as well as in some other knight endings with a small number of pawns. The knight sac also occurs in knight endings with a large number of pawns. It is intended to divert one or both of the opponent's pieces from the main scene of action, with the stronger side's king and pawns getting greater freedom of movement and the weaker side's knight being unable to oppose due to its restricted mobility. Sometimes the knight sacrifice is the most effective means of utilizing a material advantage. Let us now examine some examples.

White has a won position, and he is choosing the simplest and most effective way of utilizing his advantage: 1. Nxb6! axb6 2. a5 Black resigned - his knight is powerless to fight against the a5- and b5-pawns.

Estrin Y. - Zaitsev I., Moscow, 1963



(Variation from the game)

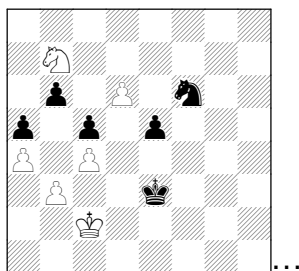
1... Ng3+! 2. Ke3

[In response to 2. Kd4 possible is both 2... Nf1 (and 2... e5+)]



2... Kxd5 3. Kf2 Nh1+! The knight perishes, but the opponent's king will be out of play for a long time. 4. Kg1 Kd4 5. Kxh1 Kc3 6. Kg1 Kxb3 7. f4 Kxa3 , and Black is winning - his pawns are unstoppable.

Alburt L. - Lerner K.,URS,1978



1. Nxc5! (threatening 2. d7) 1... bxc5 2. b4! axb4

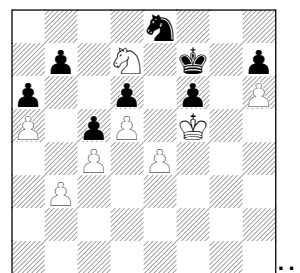
[Or 2... cxb4 3. c5 b3+ 4. Kxb3 Ne4 5. Kc4 , winning.]

3. a5 e4 4. a6 Kf2 5. a7 e3 6. a8=Q e2 7. Qf8 e1=Q 8. Qxf6+ Kg3 9. Qg5+ Kh3 10. Qd2 Qa1 11. d7 Qa4+ 12. Kb1 Qb3+ 13. Kc1 Qa3+ 14. Kd1 Qb3+ 15. Ke2 Kg4 16. Qd1!

[But not 16. d8=Q? Qf3+ 17. Ke1 Qh1+ , with a perpetual check.]

16... Qxc4+ 17. Ke3+ Black resigned.

Hernandez R - Sula,Saloniki,1984

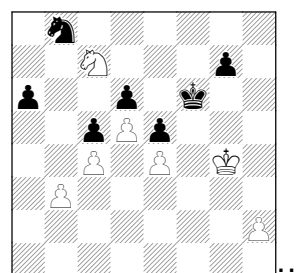


White possesses much more space, but Black's fortress seems unassailable. A diverting knight sacrifice solves White's task. 1. Nf8! Kxf8 Black is forced to let the white king pass to e6. 2. Ke6 Ng7+?!

[The only chance, because after 2... Kg8 3. Ke7 Ng7 4. hxg7 h5 5. Kxf6 h4 6. e5 White is mating]

3. hxg7+ Kxg7 4. Kxd6 h5 5. Ke7 h4 6. d6 h3 7. d7 h2 8. d8=Q h1=Q 9. Qf8+ Kh7 10. Qf7+ Kh8 11. Qxf6+ Kh7 ,and Black resigned.

Suba M. - Zapata A.,Tunis,1985



White lets a win slip out of his hands:

1. h4?

[Instead, he could have ensured the win by a knight sacrifice 1. Ne8+! Ke7 2. Nxd6! Kxd6 3. Kg5 Ke7 4. Kg6 Nd7 5. h4 Nf6 6. Kf5];



even stronger would have been 1. h3  
Kf7 2. h4 Kf6 followed by 3. Ne8+ Ke7  
4. Nxd6! , etc.]

1... Kf7 2. Kf3 Ke7 3. Kg3 Kf8 4. Kg4 Kf7  
, and soon a draw was agreed.