10. Forcing Checkmate

Objective:

1. Consistently be able to force checkmate (win) with a king and two rooks against a lone king, or a king and a queen against a lone king.

The purpose of this lesson is to teach students to force checkmate on a lone king using only two rooks, then by using only a queen with the king. During the forcemate exercise all of the following ideas appear and should be consistently pointed out by the teacher:

- (1) Force a king to the edge to checkmate it because it is easier to checkmate a king on an edge than in the center.
- (2) It is easier to checkmate a king on the edge because the king can move to fewer squares.
- (3) The attacker first cuts off the enemy king to force it to an edge, then attacks the enemy king to achieve checkmate.

The king and queen vs. king exercise, and the king and two rooks vs. king exercise, are only the first of several drills requiring the students to force checkmate on the opponent. Students also will learn how to checkmate with just a king and a rook against a king.

In each of the three exercises above, the lone king should begin in the center of the board and must be **forced** to an edge and checkmated.

Outline of lesson:

- 1. Review of check and mate
- 2. Review of stalemate
- 3. Forcing checkmate: King and two rooks vs. king
- 4. Forcing checkmate: King and queen vs. king

PART 1: REVIEW OF CHECK AND MATE

3 ways out of

check

Set up the diagram at right on the demonstration board. Then ask the following sequence of questions:

1. How do you know whose move it is?

It is black's move because black is in check.

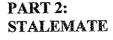
2. How many ways can black get out of check?

3 ways: Block (Ne7), Run Away (Kf7), and Capture (BxRe2)

3. What is the worst move for black?

Ne7 is the worst because white mates black with QxN

Ne7 is the worst because white mates black with QxNe7. (Rxe7 is good but not the best because it is not checkmate.)



Set up checkmate with K & Q vs. K. Then write the definition of stalemate on the board:

STALEMATE: a position in which a player's king is **not** in check, the player is to move, but has no legal move.

Have students use K & Q vs. lone king to set up a position in which the lone king is stalemated. Explain stalemate thoroughly and have students set up other simple stalemates with only a few pieces.

Explain that in a tournament game "stalemate" is a draw. Therefore, stalemate is bad for the king and queen but good for the lone king.

PART 4: FORCING

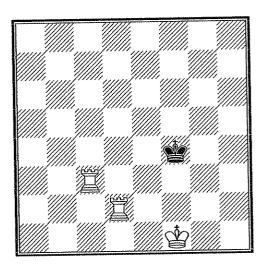
MATE WITH TWO ROOKS VS. KING

ideas that appear in the two rooks vs. king forcemate exercise Have students set up two rooks of the same color on d2 and c3, and the opposite color king on f4 in a position similar to the one shown on the right.

Students try to force checkmate on the lone king with the two white rooks.

Some ideas in this exercise are:

- Use the rooks to force the lone king onto an edge to checkmate it.



- A rook controls an entire empty file or rank, thus cutting off the lone king from that rank or file.
- The rook is a long-distance piece and does not need to be near the king to cut off a rank or file.
- Checkmate requires attacking the square the king is on and all the squares the king can move to.

The students win at this exercise by forcing the king to an edge of the board and then delivering the checkmate move.

cut off the king rank by rank, or file by file Teachers may have the students discover the correct methods of winning, or they may explain the procedure first, then have the students practice.

In explaining to the class how to accomplish this, ask them first to explain why they want the king to move to the edge of the board. Then ask them to choose an edge they will aim towards.

In the example above, the students may choose to have the king forced to the top of the board, the eighth rank.

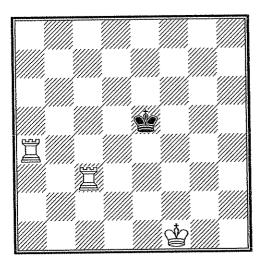
demonstrate the solution

Ask for a first move. The best move is 1.Rd4+, forcing the king to the fifth rank. Other choices, such as 1.Rc4+, allow the king the choice of which direction it will move. Because the rook controls the entire rank, the king will have to vacate the rank if it is placed in check, but the students need to see a systematic method of forcing the king where they want it to go.

After 1.Rd4+ ask what choices the king has. The king has three choices, 1...Ke5, Kf5 or Kg5. Which is best?

1...Ke5 is best for two reasons: it attacks the rook and it stays closest to the center of the board, where it is safest.

Move 1...Ke5 and ask for White's second move. White must protect its rook. There are two good ways to do this. White may use the superior mobility of the rook to move far away from the king, for example by moving 2.Ra4. Or White may use the second rook to protect the rook by moving 2.Rcc4. (See diagrams below.)



After 2.Ra4

The Black king should stay as close to the center as it can, so 2...Kd5 is the most logical move. This move also makes 3.Rc5 a bad move, as there would be nothing preventing the Black king from capturing the unprotected rook.

Remaining consistent, White should again use the superior

mobility of the rook to move away from the defending king, but not get in the way of the other rook. 3.Rh3 is a good move. 3...Kd5 (remaining in the center.) 4.Rh5+ forces the king to the sixth rank. (4.Ra5+ would give Black the option of moving to the sixth or the fourth rank.) By keeping the rooks away from the king but marching the king to the eighth rank, White will force mate by having one rook on the seventh rank and other on the eighth rank.

After 2.Rcc4, the king must move away from its attack on the rook. 2...Kf5 keeps the king away from the eighth rank. 3.Kd5+ forces the king to the sixth rank. 3...Ke5 attacks the rook. White continues with the same pattern: 4.Rcc5 Kf6 5.Rd6+ Ke7 6.Kcc6 Kf7 7.Rd7+ Re8 8.Rcc7 Kf8 9.Rd8# or Rc8#.

using only the queen to force the lone king to the edge

PART 3:

FORCING

& Q VS. K

in forcemate exercises

MATE WITH K

ideas that appear

Put a white king on a1, a

white queen on h1, and a black king on d4. Explain that the problem is for white to <u>force</u> the black king into checkmate, and allow the students time to try to checkmate each other. Some ideas are:

try to keep the queen a "knight's move" away from the enemy king

cut off squares

center to drive the

king to the edge

- White should try to force the black king onto an edge of the board by cutting off squares nearest the center that the black king can move to.
- The black king should stay as close to the center as possible.
- A queen attacks along ranks, files, and diagonals, making those squares inaccessible to the lone king.
- Checkmate requires attacking the square the king is on and all the squares the king can move to.
- The white king must be placed properly before checkmate can be played.
- White should avoid stalemating the lone king.

FOR THIS DRILL "CHECK" IS NOT ALLOWED, ONLY CHECKMATE. THIS MEANS THAT WHITE CANNOT CHECK BLACK UNLESS IT IS ALSO CHECKMATE. This helps the student learn how to avoid wasteful, unnecessary checks, reinforces the importance of checkmate over check, and shows how the queen by itself can force a lone king onto an edge of the board.

The students should see a demonstration of how the queen by itself is used to force the lone king to the edge of the board after they have had the opportunity to discover this method for themselves. It is natural that the queen is best used to force a king to the edge of the board by generally staying on squares that are a knight's move away from the enemy king. Keeping the queen in this position in relation to the king cuts off the king most effectively by attacking not only the largest number of squares but also the squares that are closest to the center, leaving the enemy king access only to the squares farther from the center, where the queen wants the enemy king to move.

The queen stays a knight's move away from the king until the king is on the edge of the board. Once on the edge, the queen is used to constrain the king to the edge but is not so close as to cause a stalemate. Then the king moves in for the checkmate.

After allowing time for the students to checkmate each other, be sure to have such a solution demonstrated to the class using the demonstration board.

The ability to checkmate with king and queen vs. king is critical and

must be mastered. This exercise, and other forcemate exercises, can be used for every student as one item on as an assessment task, or appear on a successive list of specific skills to be mastered by each student.