

Chapter 1

Rules and notation

Diagram 1-1 shows the standard notation for Othello. The columns are labeled ‘a’ through ‘h’ from left to right, and the rows are labeled ‘1’ through ‘8’ from top to bottom. In this book, squares will be referenced using a small letter followed by a number, e.g., ‘a1’ for the upper-left corner and ‘h8’ for the lower-right corner. Certain squares are assigned special letters, which will be capitalized, as shown in Diagram 1-2. This notation was developed by Othello’s inventor, Goro Hasegawa, and remains in use today. The B-squares are in the center of the edge, the C-squares are on the edge next to the corner, and the A-squares lie between the B-squares and C-squares. The X-squares are diagonally adjacent to the corners, with the ‘X’ indicating danger.

	a	b	c	d	e	f	g	h
1	a1	b1	c1	d1	e1	f1	g1	h1
2	a2	b2	c2	d2	e2	f2	g2	h2
3	a3	b3	c3	d3	e3	f3	g3	h3
4	a4	b4	c4	d4	e4	f4	g4	h4
5	a5	b5	c5	d5	e5	f5	g5	h5
6	a6	b6	c6	d6	e6	f6	g6	h6
7	a7	b7	c7	d7	e7	f7	g7	h7
8	a8	b8	c8	d8	e8	f8	g8	h8

Diagram 1-1

	a	b	c	d	e	f	g	h
1		C	A	B	B	A	C	
2	C	X					X	C
3	A							A
4	B							B
5	B							B
6	A							A
7	C	X					X	C
8		C	A	B	B	A	C	

Diagram 1-2
Square names

	a	b	c	d	e	f	g	h
1								
2								
3								
4				○	●			
5				●	○			
6								
7								
8								

Diagram 1-3
Black to move

Black and White, written with capital letters, will refer to the players, while lowercase letters (black and white) will refer to the color of the discs. For example: “at the end of the game there were more black discs than white discs, so Black won and White lost”. Black and White are referred to as “he”, although they could of course be “she”, as many women play Othello, including Carol Jacobs, who won the U.S. Othello Championship twice in a row.

Compass directions (north, south, east, west) are sometimes used to refer to areas of the board (top, bottom, right, and left, respectively).

Rules of the game

1. The game begins with black discs on d5 and e4, and white discs on d4 and e5, as shown in Diagram 1-3.
2. Players alternate taking turns, with Black moving first.
3. A legal move consists of placing a new disc on an empty square, and flipping one or more of the opponent's discs.
4. Any of the opponent's pieces which are 'sandwiched' between the disc just placed on the board and a disc of the same color already on the board should be flipped. Sandwiches can be formed vertically, horizontally, or diagonally. To form a sandwich, all of the squares between the new disc and the disc of the same color already on the board must be occupied by the opponent's pieces, with no blank squares in between.
5. Pieces may be flipped in several directions on the same move. Any pieces which are caught in a sandwich must be flipped; the player moving does not have the right to choose to not flip a disc.
6. A new disc can not be played unless at least one of the opponent's discs is flipped. If a player has no legal moves, that is, if no matter where the player places a new disc he could not flip at least one disc, that player passes his turn, and his opponent continues to make consecutive moves until a legal move becomes available to that player.
7. If a player has at least one legal move available, he must make a move and may not pass his turn.
8. The game continues until the board is completely filled or neither player has a legal move.

Scoring

Scoring is done at the end of game. The usual way to determine the score is to simply count the number of discs of each color, e.g., if there are 34 black discs and 30 white discs, then Black wins 34–30. If both players have the same number of discs, then the game is a draw.

In tournament play, if one player captures all of his opponents discs, the game is usually scored as a 64–0 victory for that player, regardless of the number of discs on the board. Further, in certain tournaments, such as the World Championship, empty squares are awarded to the winner. For example, if at the end of the game there are 32 black discs and 29 white discs, with 3 empty squares, the score is recorded as a 35–29 victory for Black.

Examples

Diagrams 1-4 through 1-9 show a sequence of moves at the start of the game to demonstrate the rules. In Diagram 1-4, Black makes the first move of the game to f5, sandwiching the white disc on e5 between this new disc and the black disc on d5. In the diagram, the numeral 1 on the disc on f5 indicates that this is where the first move is played. The diamond-shaped black disc on e5 indicates that this disc was white before the move, and was flipped as the result of Black's move. Below the diagram, the phrase 'White to move' indicates that White will make the next move in the game. In Diagram 1-5, White plays to f6, sandwiching the disc on e5 diagonally using the existing white disc on d4. In Diagram 1-7, White plays to f4, flipping discs in two directions. The black disc on f5 is sandwiched between the new disc on f4 and the white disc on f6, while the black disc on e4 is sandwiched between f4 and d4. In Diagram 1-9, White plays to c5, sandwiching the black discs on d5 and e5 using the existing white disc on f5.

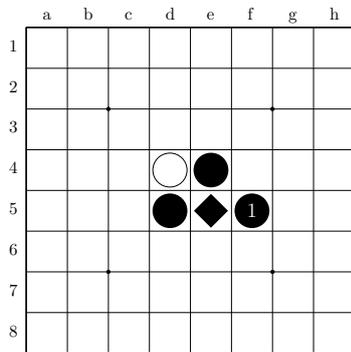


Diagram 1-4
White to move

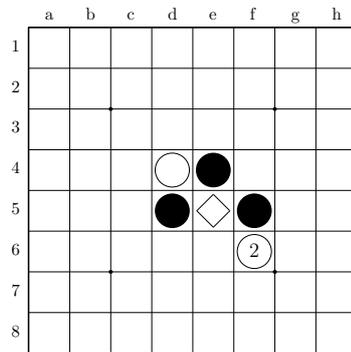


Diagram 1-5
Black to move

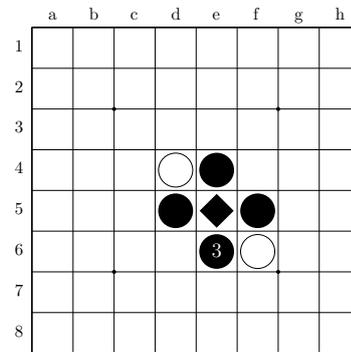


Diagram 1-6
White to move

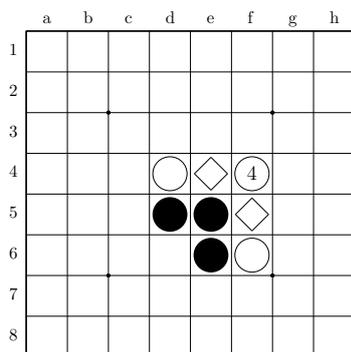


Diagram 1-7
Black to move

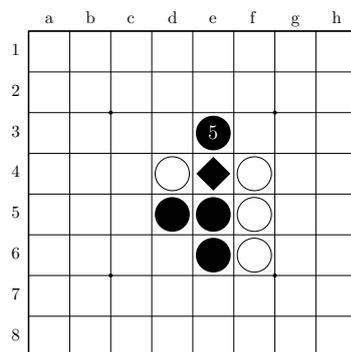


Diagram 1-8
White to move

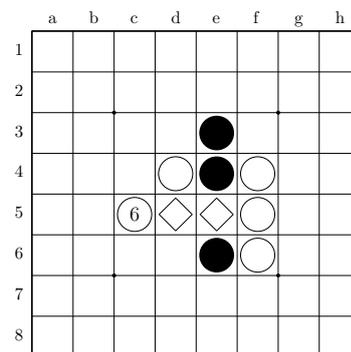


Diagram 1-9
Black to move

Suppose that in the position shown in Diagram 1-10, Black moves to f8. Diagram

1-11 shows the correct position after this move. The white disc on e6 is completely surrounded by black discs, but Black does not get to flip this disc, as it was not sandwiched by the move to f8. Diagram 1-12 shows a position in which White does not have a legal move. White passes, and Black moves again.

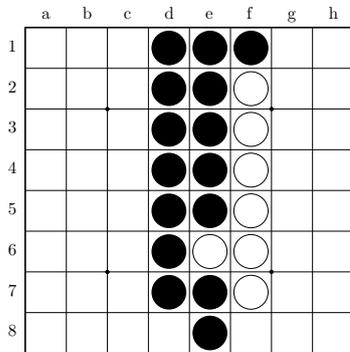


Diagram 1-10
Black to move

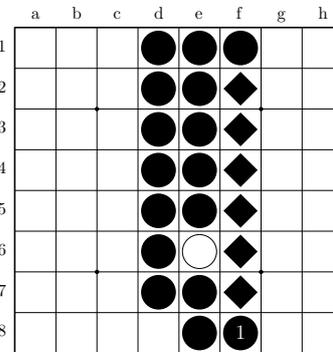


Diagram 1-11
White to move

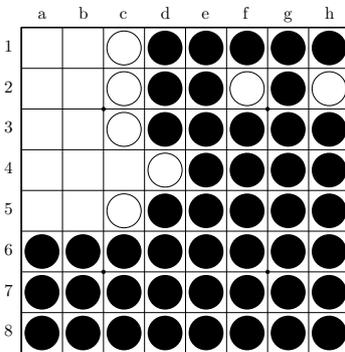


Diagram 1-12
White passes

Playing through a transcript

Diagram 1-13 shows an example of a transcript of a complete game. The numbers indicate the order in which the moves were made, but not which pieces were flipped. To replay the game, place a black disc on the square marked 1 (f5 in this case), and flip pieces according to the normal rules of the game (e5 should be flipped to black in this case). Continue by playing a move for White on the square marked 2, a move for Black on the square marked 3, etc. Diagram 1-14 shows the position created after move 30, while Diagram 1-15 shows the final position. Partial transcripts are sometimes used to indicate a sequence of moves (see Diagram 2-9 for an example).

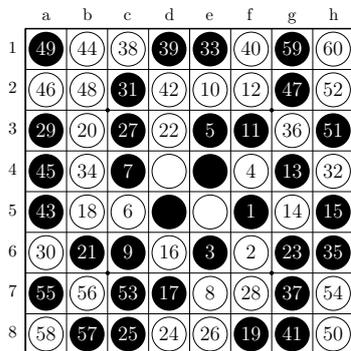


Diagram 1-13
Transcript

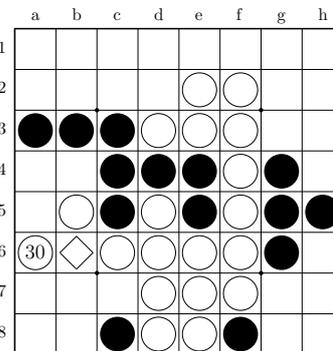


Diagram 1-14
After move 30

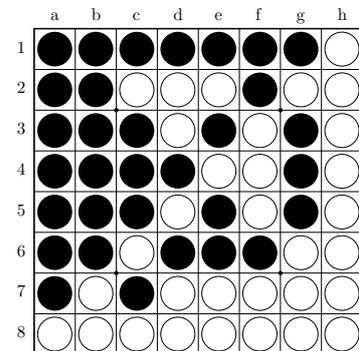


Diagram 1-15
Final position

Chapter 2

Corners and stable discs

Perhaps the most basic strategy in Othello is to take the corners. By the rules of play, it is impossible to flip a disc in a corner, so that if you are able to take a corner, that disc will be yours for the rest of the game. In Diagram 2-1, the disc on h8 must be white at the end of the game: even if Black later moves to both g8 and h7, he can not capture the disc on h8. Moreover, once you have a corner, it is often possible to build a large number of discs that are protected by the corner and can never be flipped. Such discs are called **stable discs**.

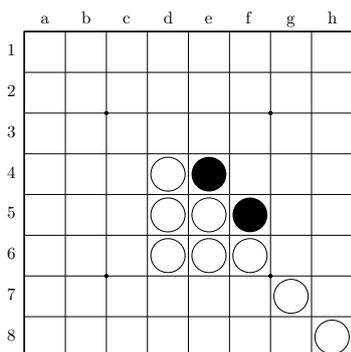


Diagram 2-1

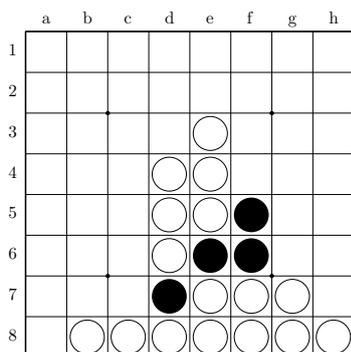


Diagram 2-2

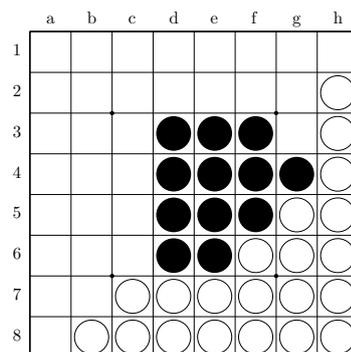


Diagram 2-3

In Diagram 2-2, the discs on the bottom row are stable discs, and in Diagram 2-3, all 21 white discs are stable discs. If this is not obvious to you, then take some time now to convince yourself. Set up the positions on a board, then try to flip the stable discs by placing black discs wherever you like. There is simply no way for Black to get “behind” these discs to surround and flip them. The possibility of building up stable discs usually makes corners very valuable, especially early in the game.

If taking corners is that good, then it should be obvious that you usually do not want to give any to your opponent! Given the rules of the game, the only way for your opponent to take a corner is if you play in one of the squares next to a corner, i.e., the C-squares or X-squares. The X-squares are particularly dangerous, and a move to an X-square early in the game is almost certain to give up the adjacent corner. For example, in Diagram 2-4, White has just moved to the X-square at g7. Although Black can not take the h8 corner immediately, if he can establish even one disc on the c3-f6 diagonal, then Black will be able take the corner.

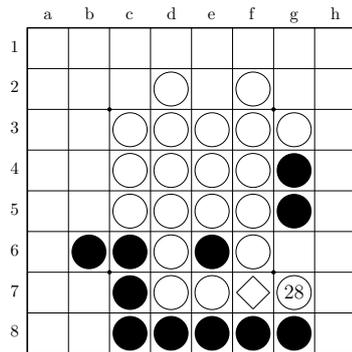


Diagram 2-4
Black to move

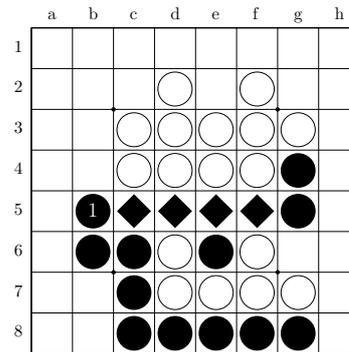


Diagram 2-5
White to move

One possibility is for Black to play b5, capturing the disc on e5, as shown in Diagram 2-5. No matter where White plays, he will not be able to recapture the e5 disc, and Black will be able to take the h8 corner on his next turn. Once black has the corner, all of his discs on row 8 become stable discs, and later in the game he is likely to be able to create stable discs on the right edge as well. In general, the earlier in the game a corner is taken the more valuable it is, as the potential for building up stable discs around the corner is greater. In most cases, moving to an X-square early in the game will prove to be a fatal error, although later in the book we will examine some exceptional circumstances under which early X-square moves are useful.

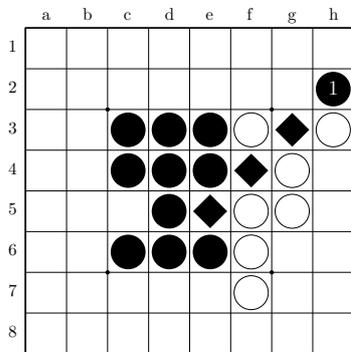


Diagram 2-6
White to move

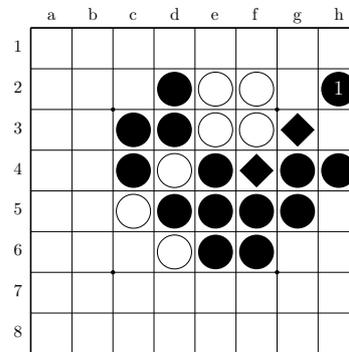


Diagram 2-7
White to move

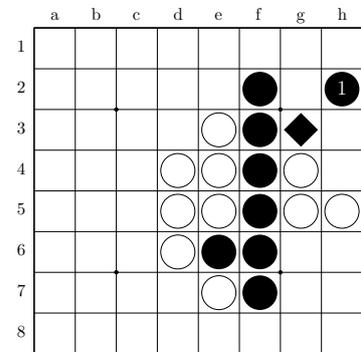


Diagram 2-8
White to move

While moves to the X-square will usually allow the opponent to take the adjacent corner, for C-squares the degree of danger depends largely on the rest of the squares on the same edge. For example, in Diagrams 2-6, 2-7, and 2-8, Black will quickly lose the h1 corner. In Diagram 2-6, White simply takes the corner on the next move. In Diagram 2-7, White can play h3; Black has no way of capturing the h3 disc, and White will be able to play h1 on his next turn. Can you see the way that White can capture the h1 corner in Diagram 2-8?

Starting from Diagram 2-8, White should play h3, gaining access to the h1 corner. Even if Black captures the h3 disc by playing h4, as in Diagram 2-9, White still has access to the corner, as shown in Diagram 2-10. As these diagrams suggest, C-squares are often the most dangerous when the adjacent A-square is empty, allowing the opponent to attack the corner by playing into the A-square. We will see many more examples like this in later chapters.

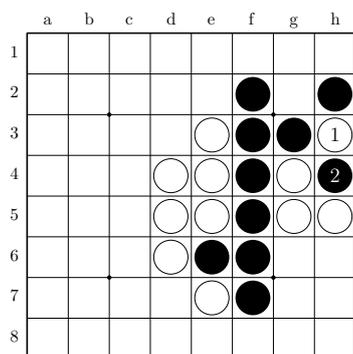
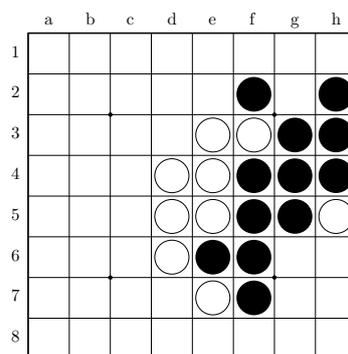
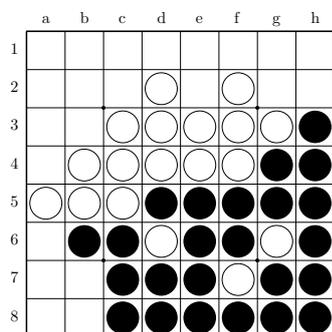
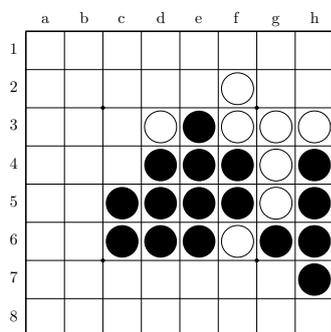
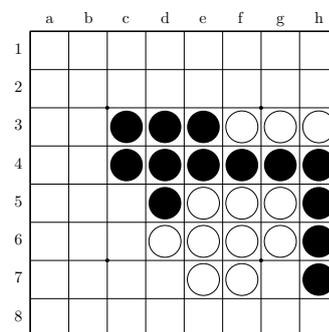


Diagram 2-9

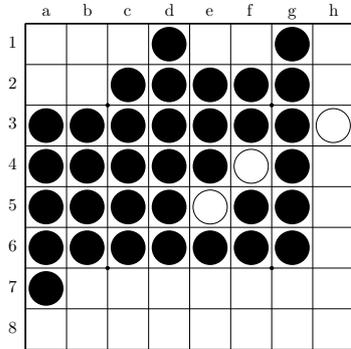
Diagram 2-10
White to move

While there are many circumstances under which C-squares are bad moves, they are quite often perfectly good moves, and frequently they involve no danger of giving up a corner despite being adjacent to it. Diagrams 2-11, 2-12, and 2-13 all show examples where Black has a good C-square move at h2. In Diagram 2-11, h2 builds on Black's stable discs, and offers no prospect of white taking the h1 corner. In Diagram 2-12, Black must play h2 to prevent White from capturing the h8 corner. Once he does so, he is in no immediate danger of losing a corner. In Diagram 2-13, black can play h2 and later play another C-square at h7, all with no danger of losing a corner. As these diagrams suggest, the best time to take a C-square is often when you have pieces of your own color in the other squares along the edge.

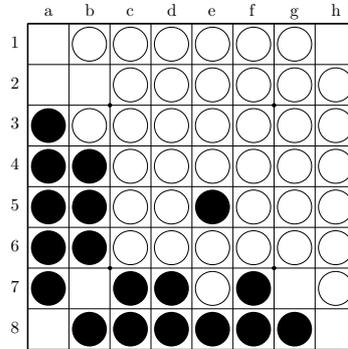
Diagram 2-11
Black to moveDiagram 2-12
Black to moveDiagram 2-13
Black to move

Exercises

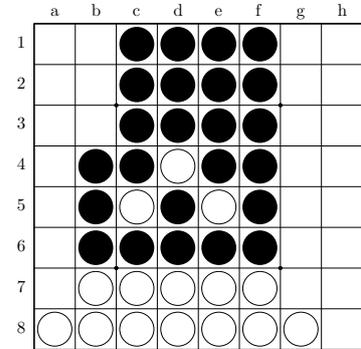
In each diagram, find the best move. Answers begin on page 11.



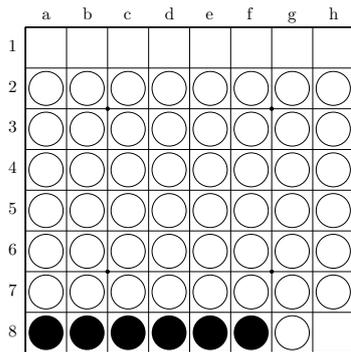
Exercise 2-1
White to move



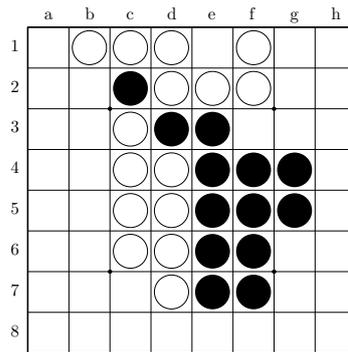
Exercise 2-2
Black to move



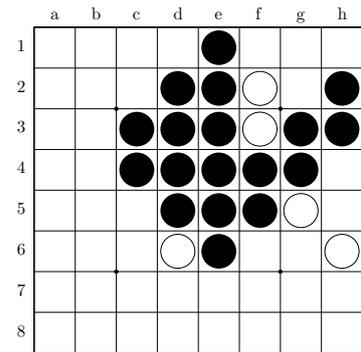
Exercise 2-3
White to move



Exercise 2-4
White to move



Exercise 2-5
Black to move



Exercise 2-6
White to move

Chapter 3

Frontier discs and walls

In chapter 2, we learned about the value of corners, and the danger of moving to X-squares and C-squares. While knowing this alone might be enough to let you win against a complete novice, it will not get you far against more seasoned competition. In games between players that are both aware of the strategies presented in chapter 2, neither player will voluntarily make the sort of bad X-square and C-squares moves that give up corners for no reason. If you want your opponent to make these moves, then you will have to force him to do so. That is, you want to create a situation where the *only* moves available to your opponent are bad moves. How to go about doing this is the subject of this chapter, and indeed most of the rest of the book.

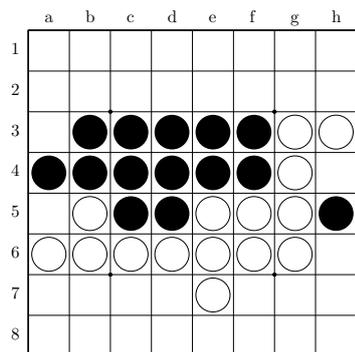


Diagram 3-1
White to move

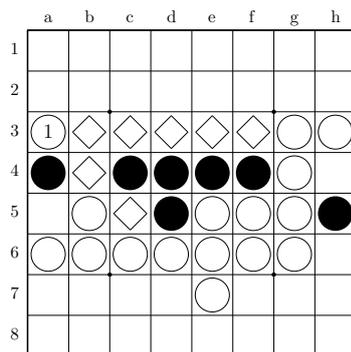


Diagram 3-2
Black to move

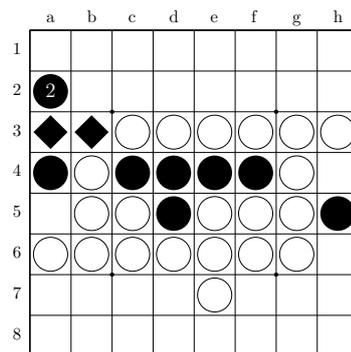


Diagram 3-3
White to move

Diagram 3-1 shows the sort of position that often arises in games between an expert (Black) and a novice (White). Many novices choose their moves mainly on the basis of the number of discs that are flipped, with the more discs flipped the better. After all, the object of the game is to end up with as many pieces as possible, so it seems logical to want to take a lot of pieces at every point during the game. Following this logic, the novice chooses to play a3, flipping 7 discs, as shown in Diagram 3-2. The problem with this move becomes apparent after Black replies with a2, resulting in the position shown in Diagram 3-3.

In Diagram 3-3, White's only legal option is the b2 X-square, which White is obliged to play whether he wants to or not (Diagram 3-4). This immediately surrenders the a1 corner (Diagram 3-5), and Black will eventually gain many ...

Answers to Exercises

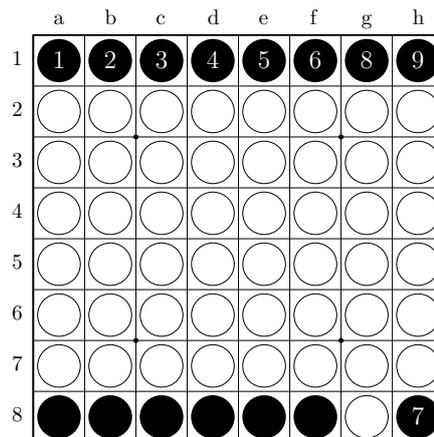
Chapter 2

Exercise 2-1 White should play e1, capturing the disc at e4, which will provide access to the h2 corner.

Exercise 2-2 Black should play a2. Although this is a C-square, there is no danger of White gaining access to the a1 corner. Further, this move flips the disc at d5, which will allow Black to take the h1 corner.

Exercise 2-3 White should play a7, using the a8 corner to build more stable discs.

Exercise 2-4 This is an extreme example of building up stable discs. The correct sequence of moves is shown in the diagram.



Exercise 2-5 Black should fill in the hole at e1. Since White can not capture this disc, Black will be able to take the a1 corner.

Exercise 2-6 White should play h4, threatening to take the h1 corner. If Black tries to prevent this by playing h5, the white disc at h6 still allows White to take the corner.