Lincense Information

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The file DomGrid2.zip may be freely distributed. You may not alter it   or any of its contents. You may not distribute any   portion of it, only the complete package.

You may not charge anyone for a copy of DomGrid. However, you may include   it in a CD or disk collection of shareware, freeware, and/or demos   whose cost is less than $1 per program included.

Only the Demo version of DomGrid is free. You may obtain a single user license for the Registered version by purchasing a <u>Registration Key</u>. The license entitles you to install the Registered version on one or two computers used by you. No one may distribute or transmit a copy of the Registered version of DomGrid. Nor may anyone distribute or transmit a copy of any Registration Key for DomGrid.

DomGrid: Introduction

DomGrid is a collection of Domino Grid puzzles for Windows 95/98. You may not be familiar with this kind of puzzle but if you try them you may find them as fascinating as we do.

The Registered version of DomGrid has 3,000,000 puzzles. We can safely describe that as a lifetime supply. The Demo version, distributed for free, contains 36 examples. The two versions are both contained in the same program -- they are the same except for the number of puzzles available. If, after trying our puzzles, you would like some more (lots more!) you may purchase a Registration Key to unlock all 3,000,00 puzzles. The price is $15.

You are free to give copies of the Demo version to your friends -- we hope that you do. But please take note of our License Information.

You should begin of course by Installing DomGrid. Then go to the help page How To Play DomGrid which contains a table of links to pages which teach you to use DomGrid. They start with a description of the puzzles, continue with a description of how to use the program, and conclude with an extensive collection of tips on how to attack the puzzles.

After you have tried the Demo version we hope of course that you will want the Registered version for which you will need a Registration Key.

Whether or not you decide to register DomGrid we hope that you enjoy this program. We would be happy to recive any comments or suggestions.

Email the author: bpaul@hoflink.com

Get the latest information on DomGrid: http://members.xoom.com/BJPaul/
Alternate Link for Information: http://hoflink.com/~bpaul

Registering DomGrid

You need a Registration Key to gain access to the 3,000,000 puzzles in DomGrid's Registered version. The Registered version and Demo version are the same program -- the Registration Key turns the program into the Registered version.

The price of the Key is $15. That gives you a single user license as described in License Information. You may order by check or money order or with a major credit card.

Your Registration Key will be based on your name and sent to you by email. So we need your full name and your email address when you order. We will email your Key within three business days of receiving your order.

Check or Money Order

Make your check or money order for $15.00 payable to Barry J. Paul and mail it to:

Barry J. Paul
P.O. Box 305
Great Neck, NY   11022

Credit Card

You may use your credit card to order DomGrid from the Web based vendor Register Now.
They will immediately notify us by email and we   will email your Key directly to you. Go to our page on their site:

https://www.regnow.com/softsell/nph-softsell.cgi?item=1489-1

Click the link to go there now. (Depending on how your system is configured, it may be necessary for you to first connect to the Internet.) Or you can copy the address to the Windows 95/98 Clipboard and then paste the address into your browser.

Next: Using Your Registration Key

Installing DomGrid

To install DomGrid copy these four files to a single directory:

DomGrid2.exe   The program.

DomGrid2.hlp   The help file.

DomGrid2.cnt   The help contents file.

DomGrid.cfg   Used by DomGrid to record your custom settings.

If you obtain a Registration Key for DomGrid the program will create a fifth file in the same directory:

DomGrid.key   Registration Key file.

This is a free upgrade. If you have the Registered Version of DomGrid 1, then your Registration Key will be valid for Version 2.

Replace these old files:

DomGrid.exe   The program.
DomGrid.hlp   The help file.
DomGrid.cnt   The help contents file.

With the new versions:

DomGrid2.exe   The program.
DomGrid2.hlp   The help file.
DomGrid2.cnt   The help contents file.

Keep these old files:

DomGrid.cfg   Used by DomGrid to record your custom settings.
DomGrid.key   Registration Key file. (Registered version only)

To uninstall DomGrid just delete all of its files.

The Object of the Puzzles

DomGrid presents a collection of puzzles based on a standard Double-Six set of dominos. Some of the puzzles employ the Full Set of 28 dominos. Others employ the Medium Set of 21 dominos obtained by removing the dominos which show a six. Still others use   the Small Set of 15 dominos   we get by also removing the dominos which show a five.

Full Set

Medium Set
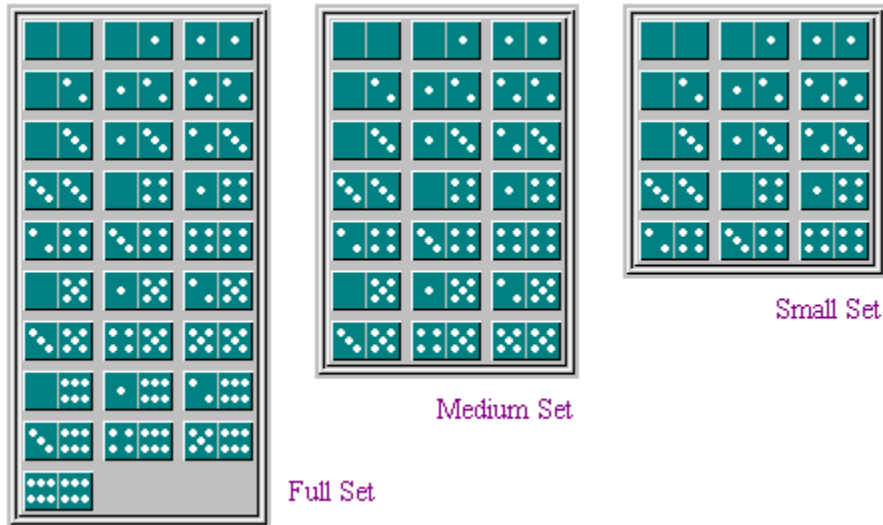
Small Set

The idea of the puzzles is quite simple. For an example we take the dominos of the Small Set and arrange them as shown in the right half of the picture below. Now we produce the puzzle on the left. It is identical with the pattern on the right except that the connections between the domino halves have been erased. The object of the puzzle is to reconstruct the domino pattern on the right or one like it. i.e. Pair off adjacent faces (domino halves)   in the puzzle to create one of each domino in the set. There will frequently be more than one way to do that. DomGrid can provide you with a solution for any of its puzzles but there is no official   solution for any puzzle. You are not trying to find our solution -- any solution will do.
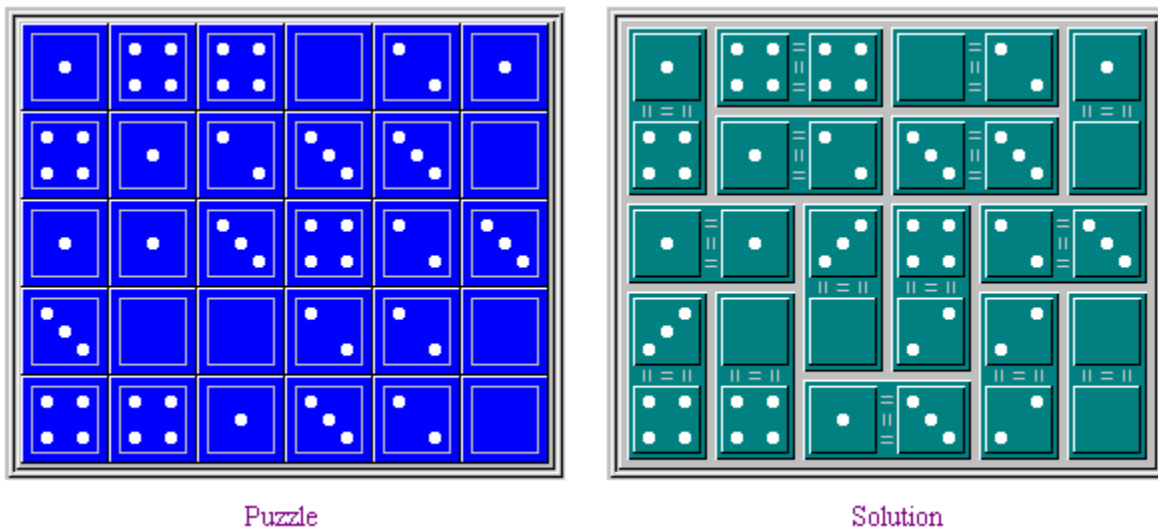
Puzzle

Solution

Note the twos and threes in the solution. Their appearance   in a horizontal domino is different from that in a vertical domino. The same would be true of sixes if we were using the full set. In our puzzles we present

all unconnected faces as if they were horizontal. Otherwise the puzzles would be much too easy.

The idea of these puzzles is simplicity itself but the puzzles themselves are far from simple.   They are quite challenging   and many of them, especially the larger ones which use all 28 dominos, are remarkably intricate tests of logical reasoning.

Customizing DomGrid

By default DomGrid will set the Dominos menu to Standard, the Checklist menu to Show Checklist, and (in the Registered version) the Formats menu to Format 1. During a session you can change these settings. [See: Settings] But if you exit DomGrid and then restart the program you will again have the default settings.
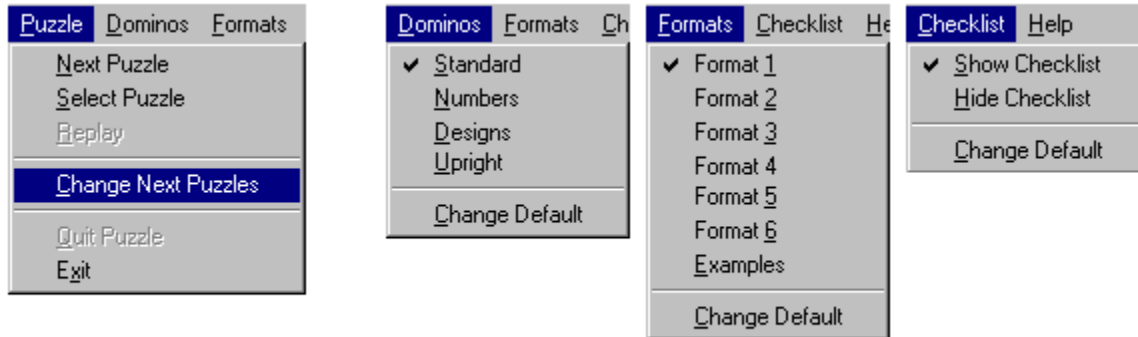
To change the defaults -- and configure DomGrid to start with the settings you prefer -- you need to use the Configure DomGrid box shown below. You can also use this box to change the Next Puzzle counter for any of the formats. You reach it by picking Change Default from any of the three menus shown above or by picking Change Next Puzzles from the Puzzle menu. It doesn't matter how you reach it, once there you may make any or all of the changes we have described.
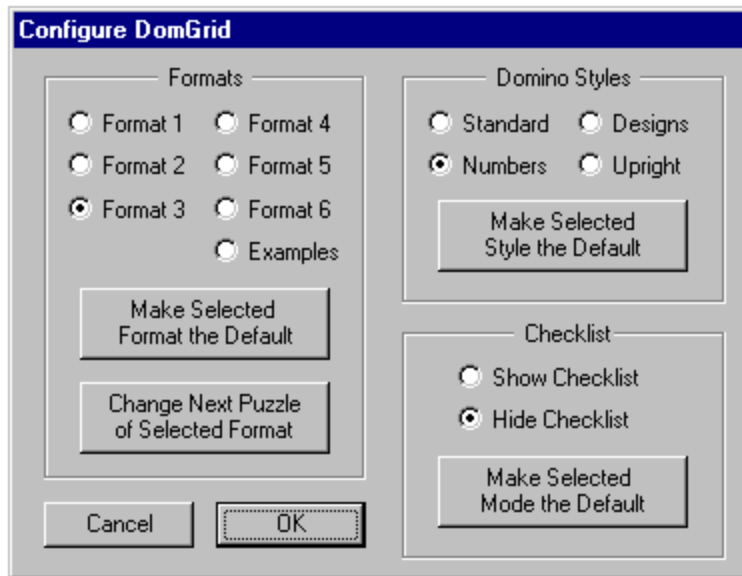
When you have finished, click the OK button to save your changes and leave Configure DomGrid. Or click the Cancel button to leave without saving your changes.

Note: Changes in default settings have no effect on current settings. They only take effect after you exit DomGrid and restart it. But a Next Puzzles change takes effect immediately.
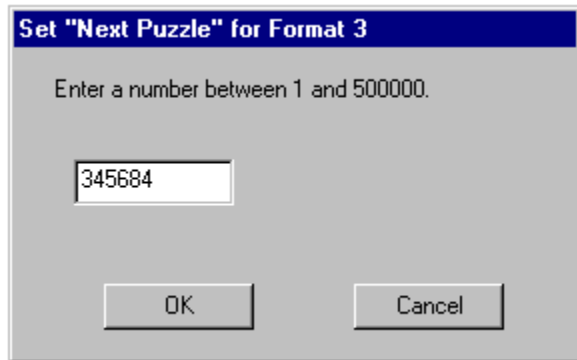
Default Domino Style: In the Domino Styles section, click on the style of your choice. e,g Numbers as in the illustration above. Then click Make Selected Style the Default. In future,

DomGrid will start up displaying dominos in the Numbers Style.

Default Checklist Mode: In the Checklist section, click on the mode of your choice. e.g Hide Checklist as in the illustration above. Then click Make Selected Mode the Default. In future, DomGrid will start up in Hide Checklist mode.

Default Format: In the Format section, click on the format of your choice. e.g. Format 3 as in the illustration above. Then click Make Selected Format the Default. In future, DomGrid will start up set to play in Format 3.

Change Next Puzzle: In the Format section, click on the format whose Next Puzzle you wish to change. e.g. Format 3 as in the illustration above. Then click Change Next Puzzle of Selected Format to get the Set Next Puzzle box. Enter a number. e.g. 345,684 as in the illustration below and click OK. The next time you select Next Puzzle for Format 3 you will get #345,684.

**Next:** Tips on Solving Puzzles

Mechanics of Play

If you haven't done so, start DomGrid and select Example 1 as explained in <u>Selecting Our Sample Puzzle.</u>

**Joining Two Faces to Form a Domino:** Click on the "Hot Area" between the two faces as shown here.

Two Faces   Click on the   Form a Domino
                   Hot Area

Two Faces   Click on the   Form a
             Hot Area   Domino
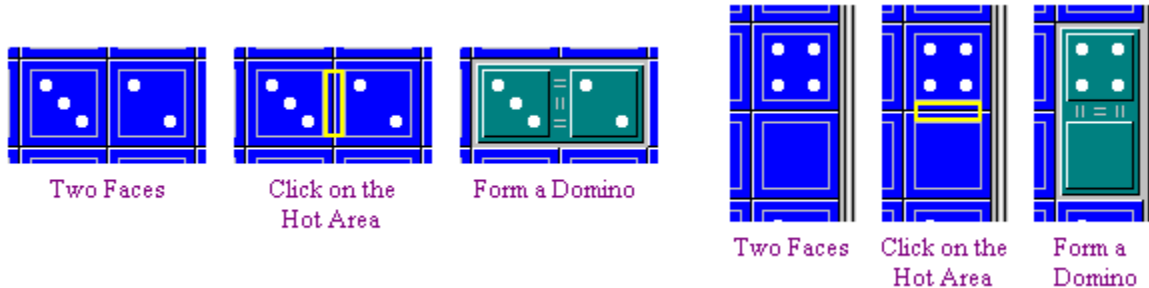
Unmaking a Domino: If you change your mind about a domino you have formed,   click anywhere on the domino. That will restore the two separate faces from which it was formed.

Making Two Copies of a Domino: A solution requires each domino in its set to appear exactly once so it is an error to to try make the same domino twice. In the left half of the illustration below, at marker <1>, we have made the 4 - 0 domino.   If we now try to click the

Click at marker < 2 >   Get error
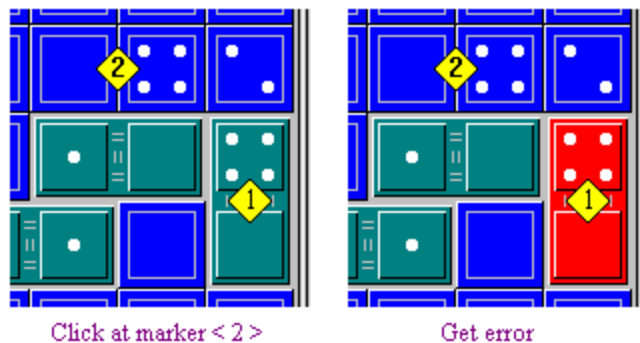
Hot Area of another 4 - 0 at marker <2> we get the error shown in the right half. DomGrid will beep and turn the original 4 - 0 red. The domino will revert to its normal color when you next click. That next click is "live" -- it can make or unmake a domino. Also you must move your cursor from the offending Hot Area before you click again or you will be repeating your error. It is, of course, permissable to change your mind and form the 4 - 0 at <2> but you must first unmake the 4 - 0 at <1>.

The Checklist: The Checklist shows each domino in the current puzzle's set. As you add each   domino to your solution its image in the Checklist is crossed off.   If we unmake a domino its cross off is removed. The llustration below shows that the 1 - 0, 3 - 1, 4 - 0, and 4 - 4 have been formed.
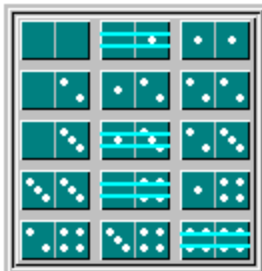
Bookmarks: New to version 2, <u>Bookmarks</u> allow you to save a position and restore it later.

Quit Game/See Solution When you are playing a puzzle you cannot start another nor can you make changes in DomGrid's settings or configuration. To do any of those things you must first end the game, either by solving the puzzle or quitting.
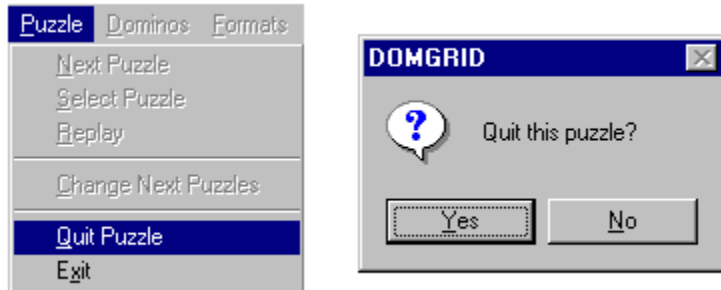
You quit a game by selecting Quit Puzzle from the Puzzle menu. DomGrid will prompt you for confirmation. If you click Yes you will be shown a solution and the puzzle will be deactivated.

Next: <u>Settings</u>

How to Play DomGrid

- Selecting Our Sample Puzzle

- Object of the Puzzles

- Mechanics of Play

- Settings

- Selecting a Puzzle

- Customizing DomGrid

- Tips on Solving Puzzles

Selecting Our Sample Puzzle

A number of topics in this help file are based on DomGrid's Example 1 with the program's original settings. Select that puzzle as follows.

- Select Standard from the Dominos Menu.

- Select Show Checklist from the Checklist Menu.

- (If you have the Registered Version) Select Examples from the Formats Menu.

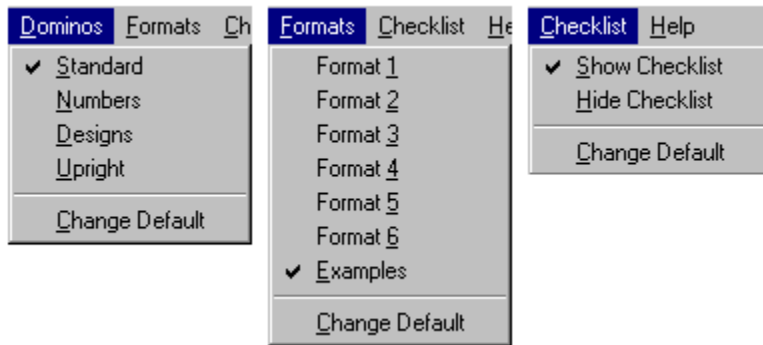Open the menus again to see that the items you have selected have checks next to them:
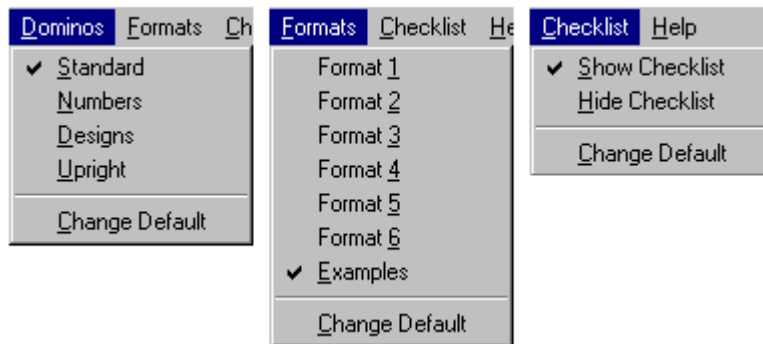
Now select Select Puzzle from the Puzzle Menu,   That produces the Play Example Puzzle box. Type   the number 1 into the box   and click the OK Button.   That will get you to Example 1.
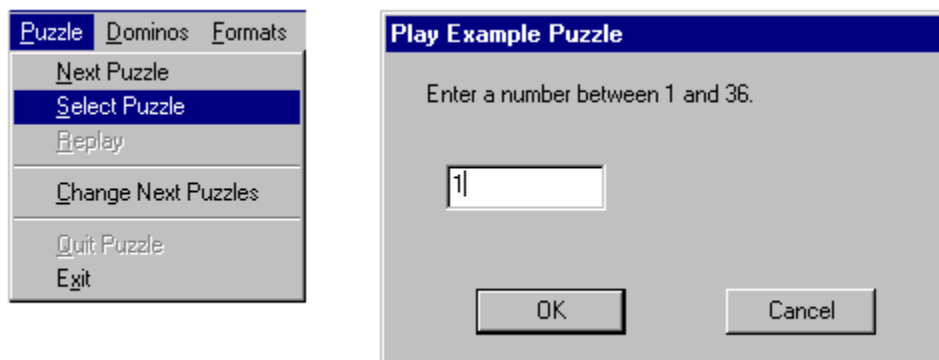

Next: Object of the Puzzles

Settings

The three menus shown above enable you to make the settings which determine exactly how your puzzles are chosen and displayed.   The menus all work on the same principle. You select exactly one setting from the list above the line.   The item you select will then have a check next to it. Only one item can be checked in any menu.

Each menu has a default setting -- the setting in effect when you run the program. Changing a setting during play doesn't change the default. You do that with the Change Default item at the bottom of each menu.   [See: Customizing DomGrid]

Formats Menu: This menu is not available in the Demo version but is an essential part of the Registered version. A puzzle's format is its size and shape. Our puzzles come in six formats. You can see them by going through the Examples which include six puzzles in each format. The puzzles of each format are numbered from 1 to 500,000. Which puzzle you get when you select, say, puzzle 342,683 depends on which format you have selected from the menu.
[See: Selecting a Puzzle]

Checklist Menu: The Checklist contains an image of each domino required to solve the current puzzle. The Checklists for our three domino sets are shown below. When you form a domino in the solution its image is crossed off in the checklist.
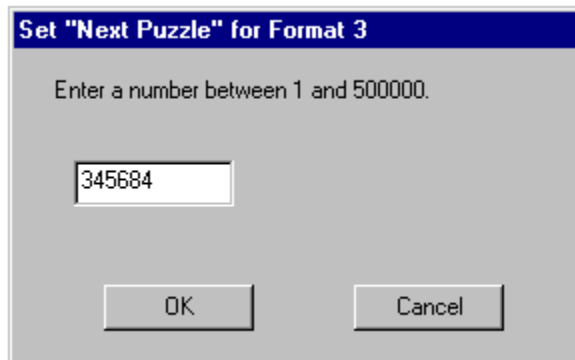
You may find this a considerable aid in playing DomGrid, especially with puzzles which employ the Full Set. It is somewhat more challenging to play without a checklist. Select Show Checklist to keep the checklist, Hide Checklist to omit it.

Dominos Menu: We have four domino styles for you to use. Choose the one you prefer from the menu. Your choice is strictly cosmetic -- you get the exact same puzzles no matter which dominos you play with. Upright is not, strictly speaking, a fourth style. It is the Numbers style with all numbers displayed right side up.   Whichever style you choose, the free (unjoined) faces in a puzzle are always displayed upright.
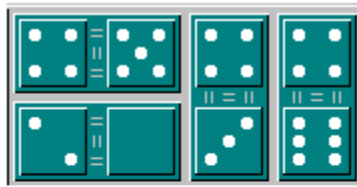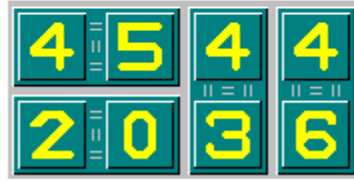
Standard

Numbers
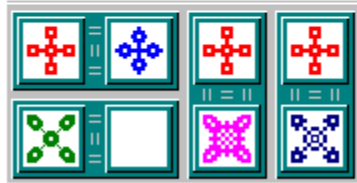
Designs

Upright

Selecting a Puzzle

A puzzle is selected by specifying its format and its number. The format is determined by the selection you have made in the Formats menu. [See: Settings] If the menu is set to Examples, then you will be selecting from among the thirtysix Example puzzles. In the Demo version you have no Formats menu and can only select Examples.

Selecting by Number: Each format's puzzles are numbered from 1 to 500,000 while the Examples are numbered from 1 to 36.   To choose a puzzle by number select Select Puzzle   from the Puzzle Menu,   That produces the Play Puzzle box. Type   the number of your choice into the box   and click the OK Button to get your puzzle.
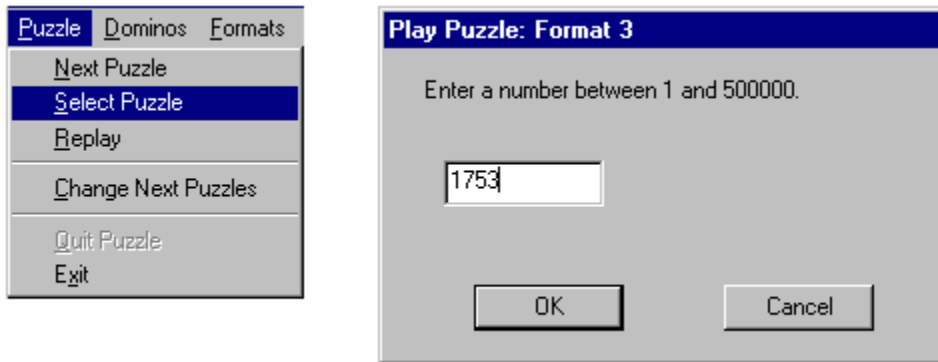
Selecting the Next Puzzle: If you select Next Puzzle from the Puzzle menu DomGrid will provide you with a puzzle of the current format. Repeated selections of Next Puzzle will give you the format's puzzles in numerical order. DomGrid keeps track of each format's progress and saves it to disk -- each time you run the program it remembers which puzzle of each format should be next.

Note that selecting a puzzle by number does not affect the "next puzzle" sequence. For example suppose you select Next Puzzle and get puzzle #146; then select Select Puzzle and play #32,009; then again select Next Puzzle. The result will be puzzle #147. If you wish to change the value of a format's next puzzle you must select Change Next Puzzles from the Puzzle menu.
[See: Customizing DomGrid]

Replay: You can replay the game you have just played by selecting Replay from the Puzzle menu. DomGrid does not remember from session to session which puzzle you last played. So there is no puzzle to replay when you start the program.

Next: Customizing DomGrid

Tips on Solving Puzzles

This section offers general advice on solving DomGrid's puzzles. If you are completely new to puzzles of this type some of the ideas we discuss may not be very clear to you. The positions in our illustrations are intended to help clarify our advice.

Getting Started: To give you a feel for the topic we begin with a detailed analysis of a simple puzzle. Please read <u>Solving Example 1</u> and then return here.

General Principles: Your first goal at all times should be to find forced plays -- pairs of faces which must be joined. Of course, there are times you must guess. But never do that until you run out of forced plays. If you do make a guess, immediately look for forced plays again -- perhaps the addition of your guess domino will have provided you with some new forced plays.

Forced Plays: The most common forced plays are of three general types. We refer for examples to <u>Solving Example 1</u>.The first is forming a particular domino with the only two faces available. e.g. Plays <1> and <2>. When you start a puzzle you should go through the entire set of dominos looking for plays of this type. The second is joining a face to the only remaining face which it touches. e.g. Plays <3> - <6>. The third, e.g. play <7>, is using four particular faces to form two particular dominos -- but with two ways to accomplish the task. We may extend this idea to blocks of six or even eight faces. Other fairly common techniques appear in our illustrations. Additionally, you will often find that a particular puzzle requires an intricate chain of reasoning of a type you haven't encountered before. That's a large part of the fun of playing DomGrid.

Accumulate Inferences: As you look at a puzzle you need to be alert to situations which give you partial information about the placement of a domino. A simple example is shown in this <u>illustration</u>. The 3 in the corner has two possible partners, both 4's. So, we know that the 3-4 will be formed at either <1> or <2>. We may not know which but the information is still valuable. e.g. The fact that some other 3 and 4 elsewhere in the grid mustn't be joined may be all we need to find a forced play. Note that the data may not be immediately useful. But you need to note it and store it for possible future use. If you've   ever played "Concentration" you've been practicing for DomGrid.

How to Guess: If you are reduced to guessing you should try to find a play that will immediately yield a lot of forced moves. There are two ways that this can help. Ideally you will complete enough of the puzzle so that you can see your way to the end. Alternately it may turn out that your guess clearly can't work. At least then you will have acquired a definite fact -- that a particular pair of faces don't belong together. Either way, you are more likely to get a definite result if you create a lot of forced moves. Also it is a good idea to find pairs of either/or plays and choose one of them for a guess. e.g. If you know that there are only two pairs left that can form the 3-2 then try one of them. If your guess fails then the other 3-2 is a forced move. Similarly, if a face touches only two other free (unjoined) faces then make a domino with it. If that fails you will know what to do next. Before you make a guess it's a good idea to save the position with a <u>Bookmark</u>.

Solving Example 1

In this section we will give a detailed description of how to solve DomGrid's Example 1.
The best way to use this material is to have DomGrid running while you read it. If you haven't done so, start DomGrid and select Example 1 as explained in Selecting Our Sample Game.

Look at marker <1> in Figure 1. We will need a 4 - 1 in our solution and the only place we can make one is there. Examine the puzzle to verify that. Similarly, <2> marks the only place we can make a 2 - 2. Go to the program now, make the two dominos, and return here.
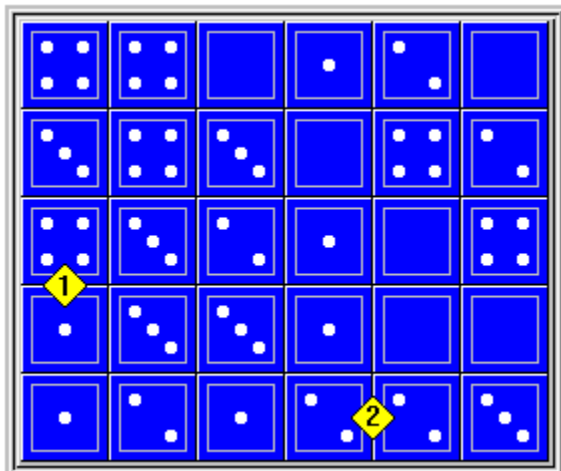
Figure 1

Figure 2 shows the puzzle after our first two moves. Consider the faces marked <3>.   The only way to use that 1 is to make the 2 - 1. Similarly we are forced to make the 3 - 0 at <4>. Once we make the 2 - 1 we are forced in the same way to make the 3 - 1 at <5>. And once we make that domino we are forced to make the 3 - 3 at <6>. Make those four dominos and return here.
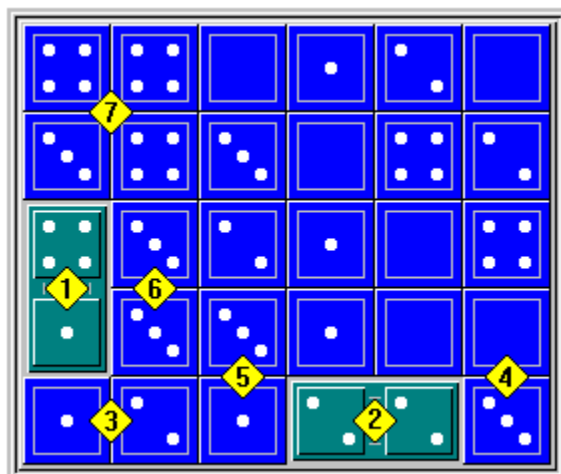
Figure 2

Still in Figure 2, consider the four faces marked <7>.   The 3 is left with two possible partners, each a 4. So it has to form the 4 - 3 with one of them. Whichever way we form the 4 - 3, the two remaining 4's of the marked set will be our only way to make the 4 - 4.   So one way or another those four face will form the 4 - 4 and the 4 - 3. [Illustration] Go to the program, make the two dominos (which way doesn't matter), and return here.

Your puzzle should now look like Figure 3. (It's OK if your two dominos at <7> are formed vertically.) We still need a 1 - 1 and 0 - 0. They can only be made at <8> and <9>. Go to the program and form them. You can now easily finish the puzzle and might as well do so while you are at it. Then come back here.
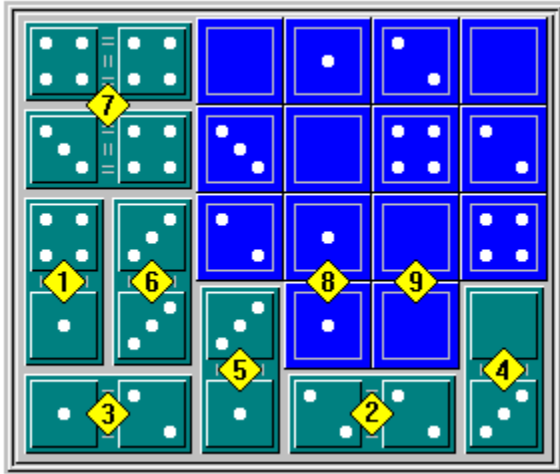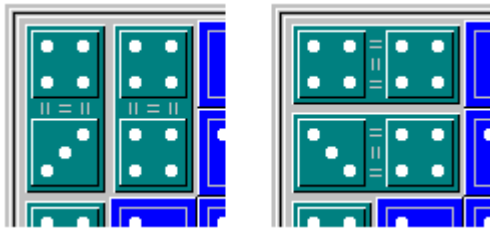

Figure 3

This puzzle was deliberately constructed to yield a simple, forced solution. Most of our puzzles are not so easy. But few of the Format 1 puzzles are difficult and they provide a good place for a beginner to start.

Return to Tips on Solving Puzzles

Two Ways to Make the Same Two Dominos

Using Your Registration Key

You need a Registration Key to gain access to the 3,000,000 puzzles in DomGrid's Registered version. The Registered version and Demo version are the same program -- the Registration Key turns the program into the Registered version.   See Registering DomGrid to learn how to order a Key.

When you order a Key you will receive an email from us whose important part will look like this:

```
-----------------------------------------------------------------------
            Dominic Ino

            ABCD1234
-----------------------------------------------------------------------
```

Of course your email will contain your name instead of Dominic's. The second line will be your Registration Key. We suggest that you keep a copy of the email on your system and that you also save a printed copy.

Open DomGrid's Help menu and click on Register to get the Register DomGrid dialog. The portion you need is shown in the illustration. Type in your name and Registration Key exactly as they appear in the email. e.g. If the email uses your whole middle name don't just type in your initial. Then click the Apply button.

If you typed correctly you will be informed that your Key was accepted. Exit from DomGrid and then restart the program. From now on you will be running the Registered version. The Formats menu will be unlocked and you will have access to all 3,000,000 puzzles.

When you click on Apply DomGrid will create the file DomGrid.key in its directory. You must leave it there or you will lose access to the Registered version. In the very unlikely event that the file becomes corrupted you will find that DomGrid has reverted to Demo status. To fix it just reenter your name and Key.
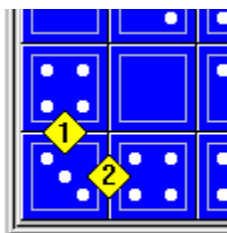
Positions (Part 1): A Matter of Geometry

These illustrations show an obvious point. In Figure 1 the marked 4 face must   form a 4-2, either with the 2 above it or the 2 below it. Either way you will isolate a block of faces. If you use the 2 above, as in Figure 2, you will leave a block of five free faces. What will you do with them -- make two and a half dominos? You must make the play shown in Figure 3, leaving six faces in the block.
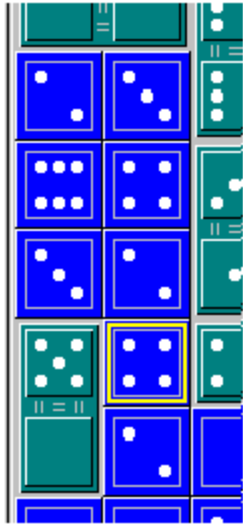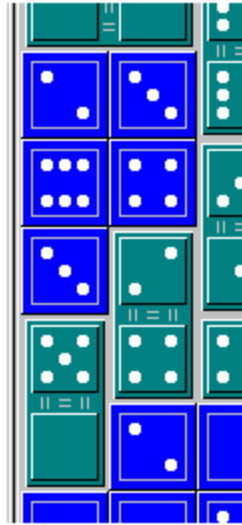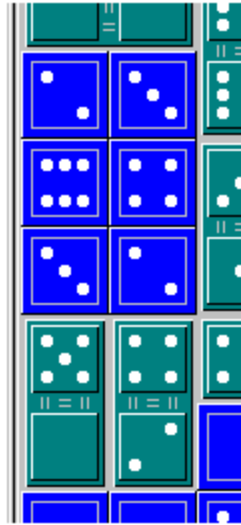

Fig 1   Fig 2 Odd = Bad   Fig 3 Even = Good

An isolated block must always contain an even number of faces. The larger a block, the easier it is to overlook this point. Figure 4 shows an extreme example. Assume you have formed the   two dominos shown in this Format 5 puzzle. Then the 5-2 we have marked is forced -- use those faces differently and you will form two odd blocks. Note that this is true regardless of what other plays you may have made. Be alert, especially in the larger formats to moves that would divide the remaining free faces into two distinct blocks.
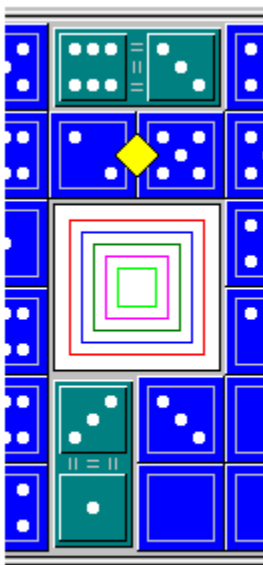

Fig 4

Positions (Part 2): Two or More at a Time

It is frequently the case that we are forced to form two particular dominos from four particular faces but have two ways to do it. Similarly we may be forced to form three (or more) particular faces from six (or more) particular faces, but with two or more ways to do it. In such cases it does not matter which way we form the dominos -- there is no official solution to any DomGrid puzzle. The situation is common and comes in a variety of forms. Here are a few.

In Figure 1 we cannot form the domino at <2> -- that would isolate three free faces. So the four dominos marked <1> must form two dominos. There are two ways to do that but either way we get the 3-2 and 3-0.

In Figure 2 assume the faces shown are the only possible source of the 2-1. There are two ways to make that domino but either way the two remaining faces are forced to make the 3-2.
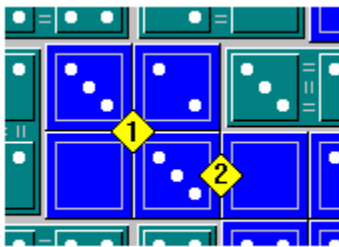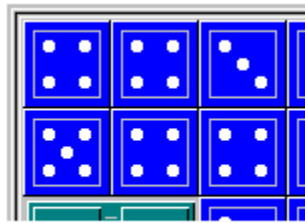

Fig 1   Fig 2   Fig 3

In Figure 3 assume the six faces shown are the only possible source of the 3-4. There are two ways to make it   but either way the remaining faces are forced to form the 4-4 and 5-4.
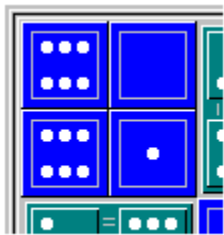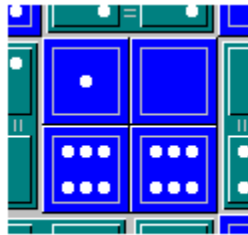

Fig 4a   Fig 4b

Assume Figures 4a and 4b are part of the same puzzle. The eight faces shown must form four dominos. There are only two ways to do that without duplicating a domino and either way we will get the 1-0, 6-0, 6-1, and 6-6.

Next: Part 3

Sample Positions

Positions (Part 3): Watch the Corners

In some of our illustrations the free face we are discussing is outlined in red while its possible partners, the faces it might be joined to, are outlined in yellow.

First a general observation. When we begin a puzzle any particular face has two, three, or four possible partners. As we play we may eliminate some of those possibilities -- ideally all but one. For example, the 5 in Figure 1 starts with four possible partners. Eventually we must join it to one of them but we start without knowing which. As we play we may eliminate some possibilities. Perhaps we will use the 1 and the 4 to form dominos, but not with our 5. Perhaps also we will make a 5-0 elsewhere. Then we will be left with only one of our original possibilities and the 5-3 will be a forced play.
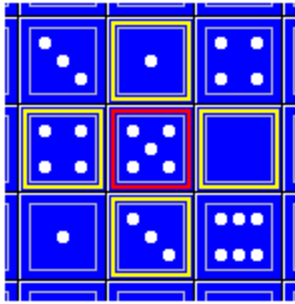

Fig 1

Another example is the corner 2 in Figure 2a. It starts out with just two possible partners. If one of those possibilities is eliminated we have a forced play. Once we start making plays we eliminate possible matchups of our free faces and eventually produce forced moves of the type we have been discussing. Such moves occur more frequently at the corners, where we need only lose one possibility, then elsewhere. And they are easier to spot when they do occur. So we suggest that you constantly monitor your puzzle's corners. As we play we effectively create new corners such as those in Figure 2b and 2c. They are just as useful as the corners we start with. Note also that some formats have more corners than others. Format 6, for example, has four corners while Format 4 has twelve -- one reason why Format 4 puzzles are easier than Format 6 puzzles.
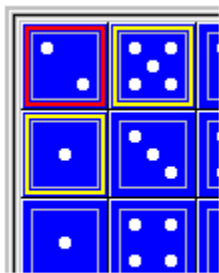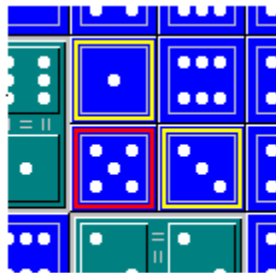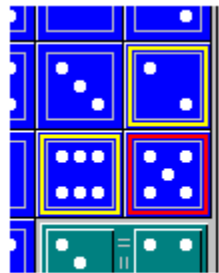

Fig 2a   Fig 2b   Fig 2c

Figure 3 shows two fragments from the same puzzle.   The corner 5 to the left must form a 5-1 at <1> or at <2>. The one at the right must form a 5-1 at <3> or a 6-5 at <4>. Obviously the 5-1 at <3> would leave us with no play at the other corner so <4> is a forced play.

The position in Figure 4 is more complicated. The corner 3 must form a 5-3 at <1> or <2>. Suppose it were <1>. Then the remaining 5 would be a new corner forced to form a second 5-3 at <3> or <4>. So <1> is wrong and we need to form <2>. Then the remaining 5 becomes a corner which must form a 5-0 at <5> or a 5-3 at <6>. But we already have a 5-3 at <2> so we will have to form <5>. In summary, <2> and <5> are
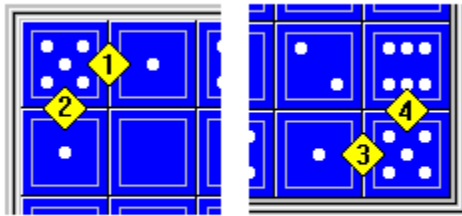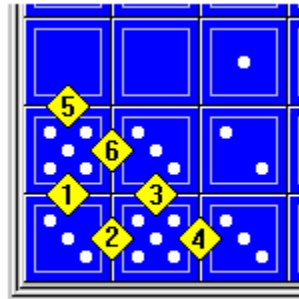
forced plays.

Fig 3

Fig 4

Bottlenecks such as the 2 in Figure 5 are close cousins to the corners we have been discussing. Here our free face has two possible partners, the 6 and the 5. It happens fairly often that using a bottleneck face will cut off a block of free faces as in our example. Here we cannot form the 6-2 -- that would cut off five faces. So the 5-2 is forced.
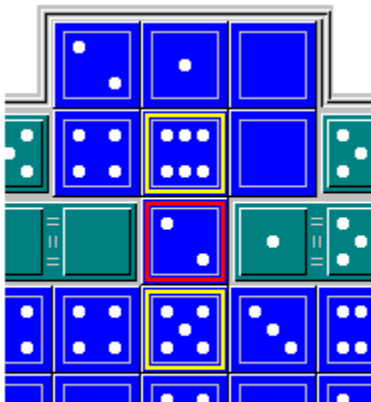

Fig 5

Next:

Positions (Part 4): Is This Domino Really Possible?

A common technique is to look for dominos which can only be made with one pair of faces. If you are considering a particular domino and find more than one pair which can form it you have to look elsewhere. But before you look elsewhere you need to be certain that all the pairs you found are actual possibilities.

Suppose you are looking for possible 5-3's and find the one marked <1> in Figure 1 and one other. It may be that you have to move on. But what if <2> and <3> are your only possibilities for 3-3? Then <1> isn't really a possible 5-3 after all and the other 5-3 is forced.

Figure 2 shows a similar position. We see <1> as a possible 4-0. But if <2> and <3> are the only possible 6-0's then <1> is not possible.
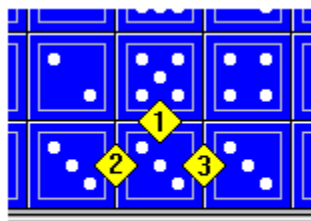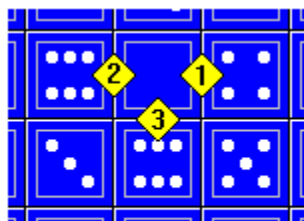

Fig 1

Fig 2

In Figure 3 there is a possible 6-1 at <1>. If we form it we will be forced to make the 1-0 at <2> and the 3-0 at <3>. If either of those dominos has already been formed elsewhere then <1> is not actually possible.
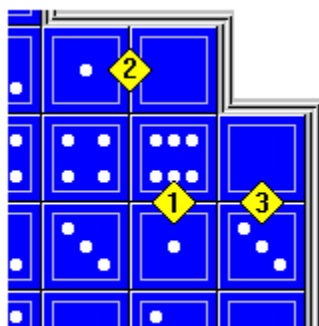

Fig 3

Speaking more generally, you need to keep your eye on the whole grid at once. Take note of as many pieces of information as you can, remember them, and try to use them in combination with one another.

Next: Part 5

Positions (Part 5): Half a Domino Is Better Than None

With regard to any particular domino we would like to know which two free faces to use to form it. Sometimes if we don't know both faces we may know one. Figure 1 shows a position of a type we have seen before. The 2 face marked [a] must join with one of the 1's to form the 2-1. Even if we don't know which 1 to use the information may be useful. For example, by restricting the possible partners for other 1's and 2's in the grid.

Sometimes this kind of information can be used more directly. In Figure 2 assume that the 0 face marked [a] must form the 5-0 with one of its neighbors. We don't need to know which. Either way we are forced to make the 6-3 at <1> and the 4-0 at <2>. In Figure 3 assume that we are looking at the only possible 1-1's and 6-1's. Then the face at [a] must be part of the 1-1 and the face at [b] part of the 6-1. Then [b] can't be part of the 1-1 so the 1-1 at <1> is forced.

Fig 1   Fig 2   Fig 3
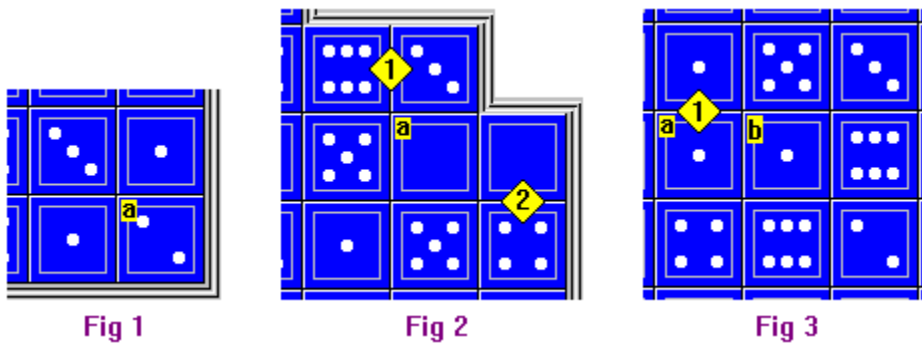
A common variation on this theme involves two or more faces. The three parts of Figure 4 are from the same puzzle. The 6 face at [a] must form the 6-3 or the 6-4. The 6 at [b] has the same two possibilities. The two 6's can't make the same domino so one will make the 6-3 and the other will make the 6-4. Then neither of those dominos can be made elsewhere. For instance, they cannot be made with the 6 at [c]. So the 6-5 at <1> is forced.

Fig 4a   Fig 4b   Fig 4c
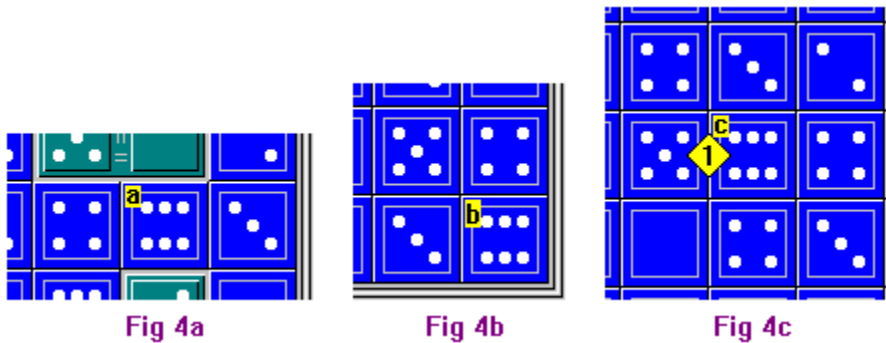
Some inferences of this type are harder to spot. The four parts of Figure 5 are from the same puzzle. The 0 at [a] must form the 1-0 or 4-0. The 0 at [b] must form the 1-0 or 5-0. The 0 at [c] must form the 4-0 or 5-0. It follows from all this that the 0's at [a],[b], and [c] among them must form the 1-0, 4-0, and 5-0. (If that's not clear try to use the three 0's differently.) Then no other 0 can form any of those three dominos. In particular the 0 at [d] cannot form the 4-0. So the 3-0 at <1> is forced.
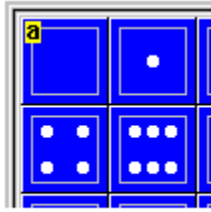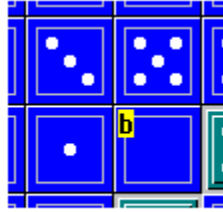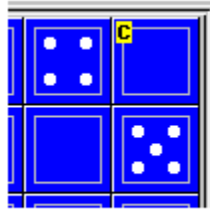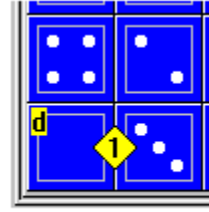
Fig 5a   Fig 5b   Fig 5c   Fig 5d

Positions (Part 6): A Little Complicated

We finish our sample positions with Format 6's Puzzle #135,710. If you have the registered version you should start that puzzle now. If not, you might find a pencil and some paper useful.

Our puzzle has only one possible 3-3 and one possible 5-5. After forming those two dominos, we are forced to make the 6-0 and 3-2 as shown.

Suppose we now try to make the 6-6 from faces [a] and [b]. Then the 6 at [d] is barred from making another 6-6 with [f], so it has to form a 6-2 with [c]. Now the 6 at [f] is a corner. It also may not form the 6-6, so it forms the 6-1 with [e]. Now the 6 at [h] is a corner. If we join it to g we will duplicate the 6-2 we made from [c] and [d], so we join [h] and [i] to make the 6-4. Now the 1 at [k] is a corner each of whose partners is a 6. But we have already made the 6-1 from [e] and [f]. This conflict follows from our forming the 6-6 with [a] and [b], so that play won't work.
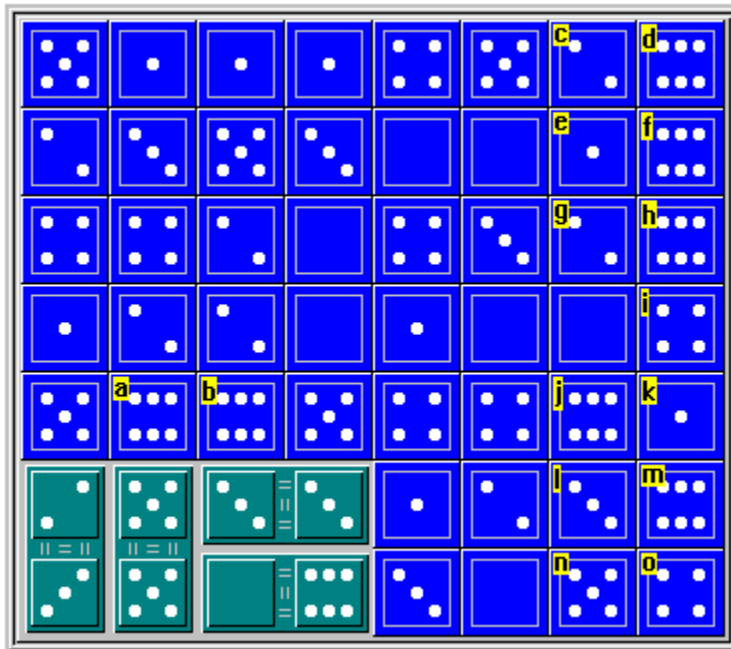
Since face [a] can't form the 6-6 it must form either the 6-5 or the 6-2. Similarly face [b] must also form the 6-5 or 6-2. Then between them faces [a] and [b] will form the 6-5 and the 6-2. Then face [d] must not form the 6-2 with [c]. So [d] and [f] must form the 6-6. When we form that domino face [h] becomes a corner. It must not form the 6-2 with [g] so faces [h] and [i] form the 6-4. Now faces [j],[k],[l], and [m] are the only faces free to form the 6-1 and 6-3. There are two ways to do that so take your pick. Now the 4 face at [o] is left with only one possible partner so form the 5-4 from [o] and [n].

Summary: Five forced moves. Form the 6-6 from [d],[f]; the 6-4 from [h],[i]; the 6-1 and 6-3 from [j],[k]. [l].[m]; and the 5-4 from [o],[n].

Bookmarks

Bookmarks allow you to save a position and restore it later on.   After starting a game and making some moves, open the BookMark menu (Figure 1) and select one of the available Save items. Make some more moves, open the menu again, select the Restore item that matches your Save, and you will get back the position you saved. You can use the Bookmarks in any order. In Figure 2a we have saved positions in Bookmarks 1, 3, and 4. If we restore the position from Bookmark 3 (Figure 2b), the bookmark will   be available to be used again. Positions can be saved only while the game is in progress. If you quit the game or exit DomGrid your bookmarks will be erased.

Figure 1

Figure 2a

Figure 2b

Bookmarks are useful when you are forced to guess. Suppose that you have found six forced moves but can't find a seventh. Save your position and then make a guess, If the guess doesn't work out you can restore your forced position and try something else.

What's New in Version 2

1) This is a free upgrade for registered users. Your Registration Key will work with DomGrid 2.

2)   The Demo version has twentyfour new puzzles, bringing the total to thirtysix.

3)   We've added a Bookmark feature which lets you save a position and restore it later.

If you are using DomGrid for the first time we suggest you read the <u>Introduction</u> now.

If you are upgrading from version 1 you should first <u>Install DomGrid2</u> then read about <u>Bookmarks.</u>