Donimoes: Puzzles with Dominoes

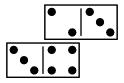
There are two kinds of puzzles: blocking and capturing.

The Blocking Puzzle's Goal

The goal is to slide all the dominoes into a rectangle, without sliding any matching numbers next to each other.

Moves

Move a domino one space along its long axis so that none of its numbers match an adjacent number on a neighbouring domino. In this example, the lower domino can move to the right, because the three doesn't match the two, and the four doesn't match the 3. You couldn't move it another space to the right, because then the threes would be right next to each other.





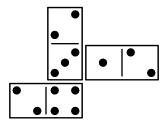
Stay Connected

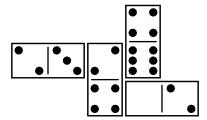
All the dominoes in the puzzle have to be connected in one solid group, diagonal connections don't count. When you move a domino, it can be disconnected during the move, as long as it is connected at the start and the end of the move. Remember that it can only move one space at a time, though.

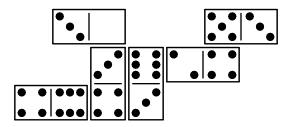
Blocking Donimoes Problems

Here are the starting positions for several Blocking Donimoes problems. The solutions are listed at the end.

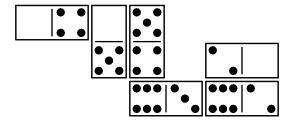
Problem 1



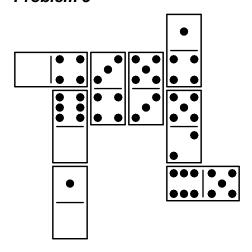


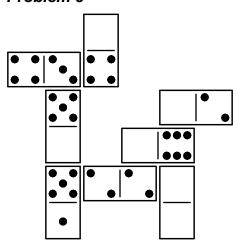


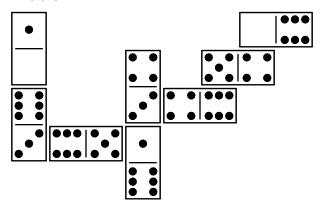
Problem 4



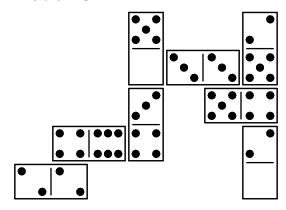
Problem 5

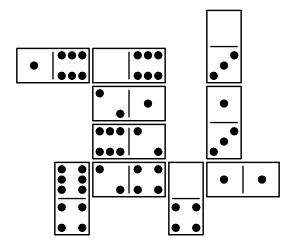


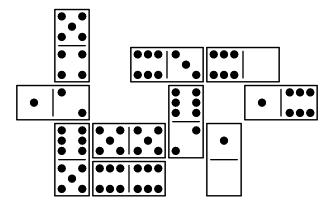




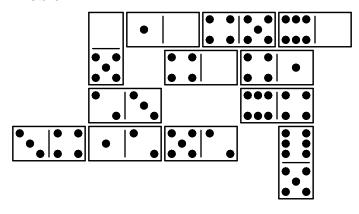
Problem 8

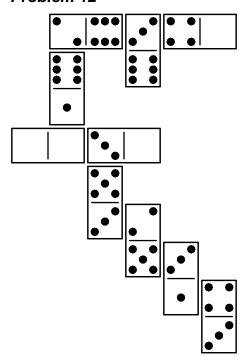


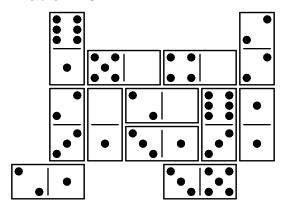




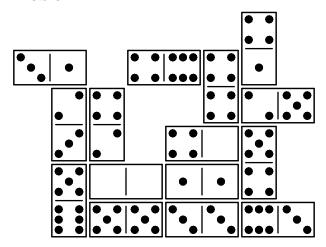
Problem 11



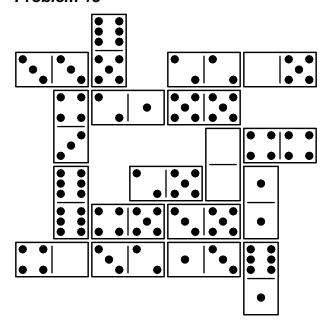


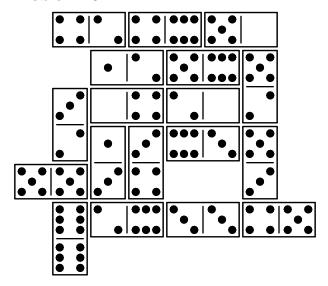


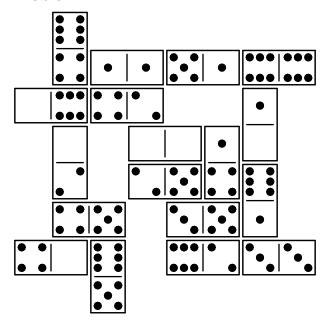
Problem 14



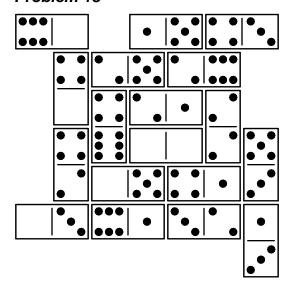
Problem 15



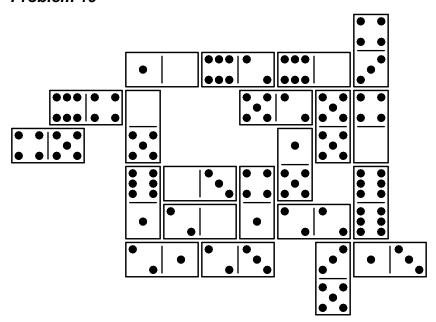


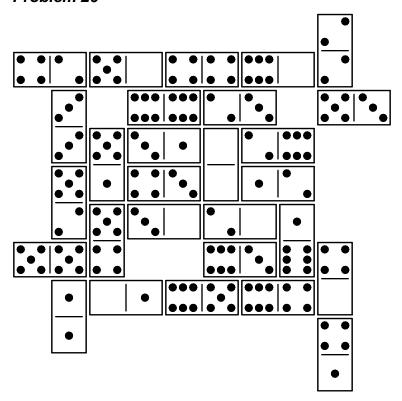


Problem 18



Problem 19





The Capturing Puzzle's Goal

The goal is to collect all the dominoes by sliding matching numbers next to each other.

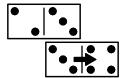
Moves

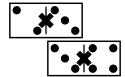
There are only two ways a domino can move.

Matching

Move a domino one space along its long axis so that it ends up with at least one of its numbers matching an adjacent number on a neighbouring domino. Then collect the domino you moved and any dominoes that match it, by removing them from the pattern. In this example, the threes match, so you collect both dominoes: solution found!



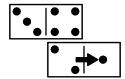




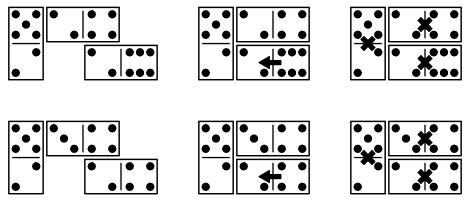
Adding

Move a domino one space along its long axis so that it ends up with at least one of its numbers next to an adjacent number that adds up to six. With an adding move, no dominoes are removed. In this example, the two adds up with the four above it to make six.





Sometimes, you can collect more than two dominoes at once. In the first example, the two matches twos on both of the other dominoes, and you collect all three dominoes. In the second example, the two matches the two to the left, and the four matches the four above it. You collect all three dominoes.



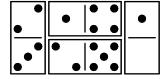
Stay Connected

All the dominoes must stay in one connected group, you can't split the group after moving or after removing the matching dominoes.

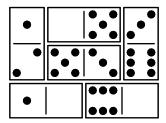
Capturing Donimoes Problems

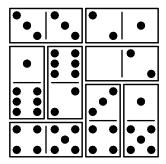
Here are the starting positions for several Capturing Donimoes problems. The solutions are listed at the end.

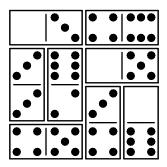
Problem 1



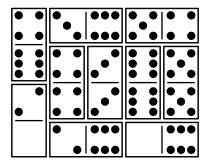
Problem 2



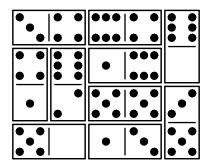


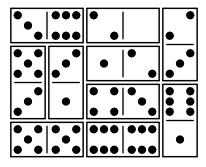


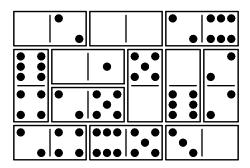
Problem 5



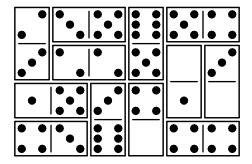
Problem 6



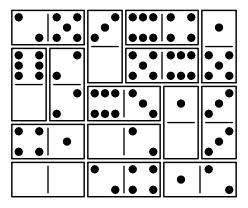


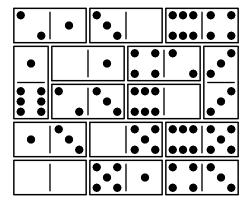


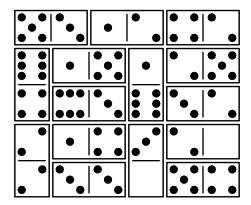
Problem 9



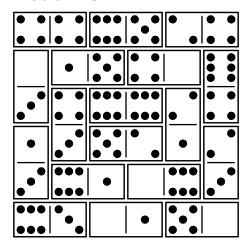
Problem 10

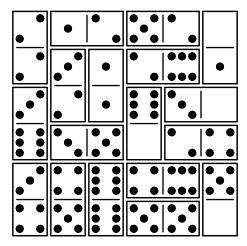


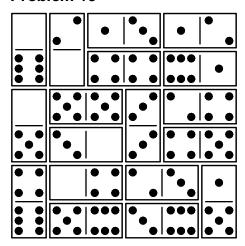




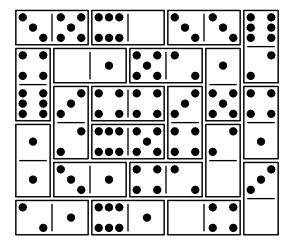
Problem 13

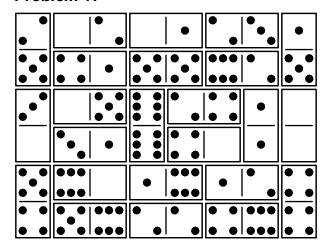


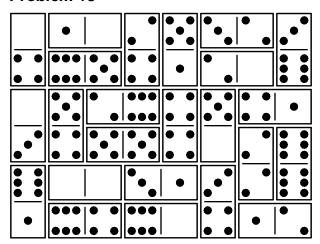




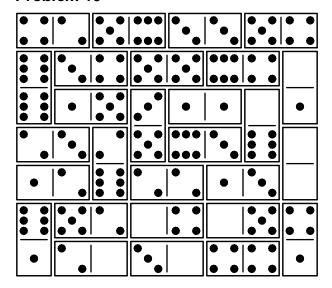
Problem 16

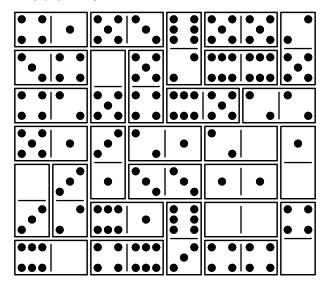






Problem 19





Domino Games

I really enjoy classic domino games like All Fives, and I've played recent inventions like Chickenfoot and Mexican Train. However, I thought I might be able to design a domino game that felt more like a grid than a chain. Tetradominoes is my attempt to do that.

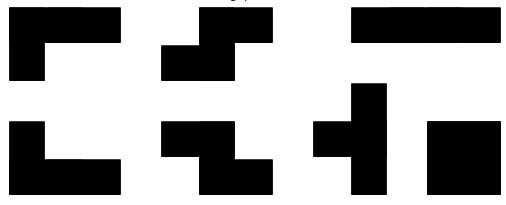
Tetradominoes

The game of life, the universe, and everything, for 2, 3, or 4 players.

Equipment

- a set of dominoes from double blank to double six
- a set of tokens (small chips or cubes that are small enough to fit on top of a domino) 2 players need 1 light token and 1 dark token, 3 players need 3 tokens in each of 3 colours (9 in total), and 4 players need 2 light tokens and 2 dark tokens
- seven cardboard tetrominoes (white on one side, black on the other)

To make your own set of tetrominoes, draw these seven shapes on a piece of plain cardboard, and cut them out. Use a marker to colour one side of each shape. Each shape should be big enough fit on top of four domino numbers, with a small gap around the outside.



Object

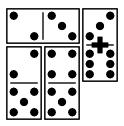
Play the most tetrominoes.

Setup

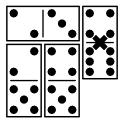
Choose a player to go first through any convenient method. In a 2-player game, the first player takes the light token. The other player takes the dark token. In a 3-player game, each player takes all the tokens of one colour. In a 4-player game, the first player and the player opposite each take a light token and the other players take a dark token. Players with the same colour tokens will play as partners. Shuffle the dominoes face down, and draw four for each player, keeping them hidden from the other players. Put the remaining dominoes and the tetrominoes within reach.

Playing Dominoes

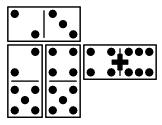
On the first turn, play any domino you like. On each turn after that, you must play a domino so that at least one of its numbers is adjacent to a matching number on a domino that was already played, and isn't covered. For example, the 36 domino can be added as shown, because the 3 matches its neighbour.



In this example, the 46 cannot be added in this position, but it could be flipped to make the 4 match its neighbour.



You don't have to match along the long side, you could also play it like this.



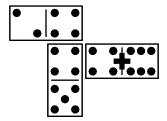
If there are no numbers uncovered at the start of your turn, play a domino so that at least one of its numbers is adjacent to a covered number (they don't have to match). If none of your dominoes match the available numbers, reveal two of your hidden dominoes, and draw one more, keeping it hidden from the other players. If you still can't play, repeat until you can. If you still can't play when there are no more dominoes to draw or when you don't have two hidden dominoes, reveal all of your hidden dominoes, and pass your turn. Leave any revealed dominoes face up until you play them.

If you have fewer than four dominoes, draw a domino and keep it hidden from the other players.

Playing Tetrominoes

After playing a domino, see if you can play a tetromino. It must cover one or both numbers on the domino you just played, it can't hang off the edge of the dominoes, and it can't cover any numbers different from the ones on the domino you just played. Also, two tetrominoes of the same colour can't be right next to each other. (Diagonal is allowed.)

For example, if you just played the 46 domino, you could play an L-shaped tetromino on the 4, 4, 4, and 6 numbers.



With 2 or 4 players, if you have a light token, you must play tetrominoes with the light side up. If you have a dark token, you must play with the dark side up. With three players, all players play tetrominoes with the light side up, and then place one of their tokens on the tetromino.

With 4 players, after a tetromino is played, the two opposing players can each take a domino from their hand, and give it to their partner. This is useful if you have two dominoes that will work well together. However, you can't tell your partner how to play it.

Game End

With 2 or 4 players, the game ends when one player or team plays four tetrominoes and wins. With 3 players, the game ends when one player plays three tetrominoes and wins.

Variant

Tournament play is a series of games until one player wins seven points. One point for each tetromino.

Domino Puzzles By Other Designers

Dominosa

The domino puzzle I often see is called either Dominosa or Domino Solitaire. You start with a grid of numbers, and you have to lay the dominoes on them. It was invented by O.S. Adler in 1874. There's an interesting proof that this puzzle is NP-hard.

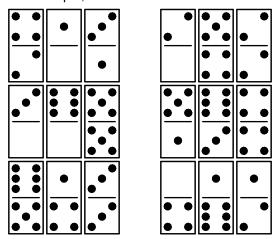
Reiner Knizia published some puzzles called Domino Knobelspass that are very similar to Dominosa.

Mountains and Valleys

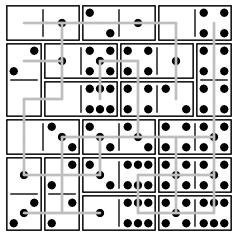
Sid Sackson included this in his Beyond Solitaire book, and I adapted it from paper, pencil, and dice to use dominoes.

To start, shuffle a set of double-six dominoes face down, then turn 18 of them face up. The remaining 10 aren't used. Then arrange the dominoes into a 6x6 square of numbers that represents a map of mountains and valleys, where blanks are at sea level, and sixes are the highest peaks. The goal is to make a map where you can walk to every square. You can walk from one square to its neighbour if the two heights are the same or differ by one. (You can't climb cliffs.)

For example, this set of 18 dominoes:



Can be arranged into this solution:



The grey lines show the paths you can walk along.

I like this solitaire, because it can almost always be solved, though finding a solution can be very difficult. There's usually more than one solution. For example, you can flip the 56 domino, above. There is a trivially unsolvable situation whenever one of the numbers from 1 to 5 is completely missing, but that can be quickly checked, and I haven't found any other unsolvable combinations.

Cooperative Version

You can play Mountains and Valleys cooperatively with other players. Shuffle the dominoes face down, then draw 9, 6, or 5 dominoes each when there are 2, 3, or 4 players, respectively. Keep your dominoes hidden from the other players.

Randomly choose a player to go first. That player chooses one of their dominoes and passes it to the player on their left. The player receiving the domino plays it on the table, then chooses one of their dominoes and passes it to the player on their left. Play continues in the same pattern until a 6x6 square is complete. After the first domino, all dominoes must be played so they have at least one neighbour, and they can't be moved after they are added.

When the 6x6 square is complete, see if the whole map is connected as described in the solitaire game. If you need a step of more than one level to get from one section of the map to another, you get a penalty of the number of levels. For example, if a map is completely connected except that you need to go from a 3 to a 5, then you would have a 2 point penalty. A perfect game is zero, and anything under 5 is a good game.

With four players, the last two players will each have an extra domino left at the end of the game.

For a harder solitaire version, draw 18 dominoes, but only turn five of them face up. Each time you play a domino, turn another one face up, until you've turned up all 18. Then play the last five. Use the same placement and scoring rules as the cooperative version.

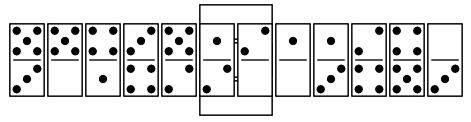
Fujisan

James Droscha designed this for the piecepack game system, and then adapted it for dominoes and pawns in a paper on using entangled components in solitaire games.

Four Shinto Priests have traveled from their various prefectures in pilgrimage to the top of Mount Fuji. You must find pathways for them to move up and down the mountain until they can all achieve the peak. Often, this will require you to guide them into positions from which they can assist each other.

Setup

Remove all dominoes with the number six and all doubles from a standard set of double-six dominoes. Shuffle the remaining 15 dominoes face down, then place twelve face-up dominoes side by side. Leave the three remaining dominoes face down, and use them to lift up the two middle dominoes as the peak of Mount Fuji. Here's an example layout:



Place a Priest (pawn) beside each number at both ends of the mountain.

Moving a Priest

- A Priest may move onto a space if the number matches the number of unoccupied spaces the
 Priest must move in a straight line to get there (including the destination space itself, but not
 including the space the Priest's starting space). For example, a Priest may move onto a space
 containing a value 4 coin if there are 3 unoccupied spaces between it and the Priest.
- Occupied spaces (containing intervening Priests) are not counted when determining if a Priest may
 move onto a particular space. For example, a Priest may move onto a space containing a value 2
 coin if there are 3 occupied spaces and one unoccupied space between it and the Priest.
- 3. A Priest may move freely between the two spaces on a domino. This is the only manner in which a Priest may move onto a blank space.
- 4. Once a Priest lands on the peak of the mountain, he will refuse to leave it, but he can move back and forth (in the same domino) or to and fro (between the two dominoes). Clarification: A Priest may pass over the peak dominoes as part of a move.
- 5. A Priest must enter the mountain from his own starting row; that is, he cannot move back or forth while he remains on the ground.

Goal

The Priests will be content when they all reach the top of the mountain.

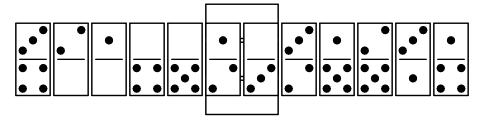
Variant

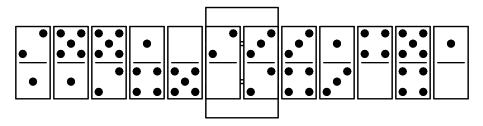
Country Road: Once all four Priests have reached the peak, move the dominoes at the peak to the Priests' original setup positions at the two ends of the mountain and continue until all four Priests have left the mountain.

Treat the spaces at the peak as blanks. Once a Priest leaves the mountain, he will not step back on.

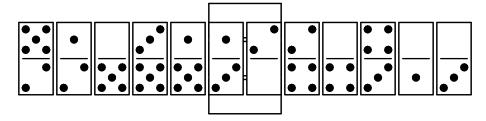
Fujisan Problems

Shuffling the dominoes generates a nice set of problems. In 1000 randomly generated problems, 92% were solvable. Of those, the median solution length was 14, with half of them between 12 and 16. Here are some more challenging problems for you to try. The solutions are listed at the end.

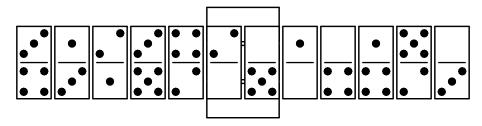




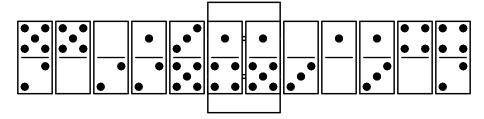
Problem 3

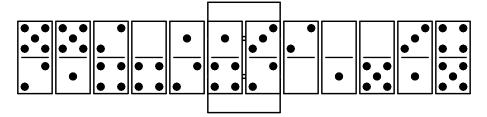


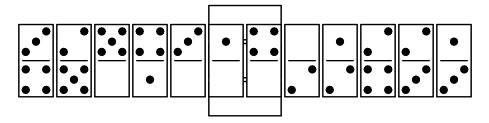
Problem 4



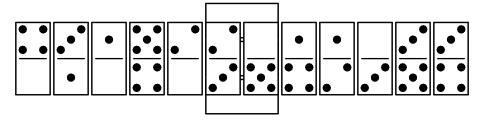
Problem 5



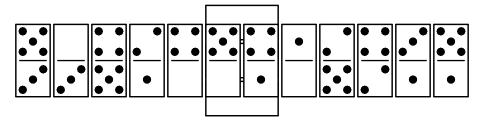




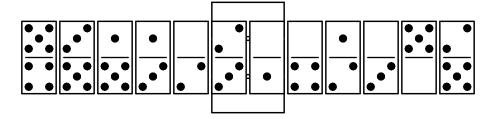
Problem 8

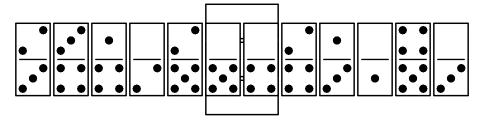


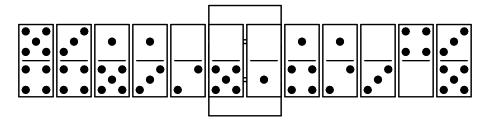
Problem 9



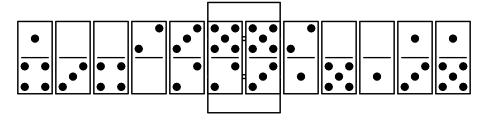
Problem 10



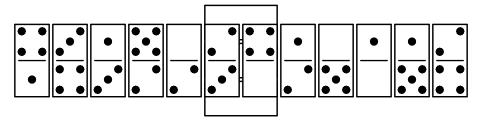




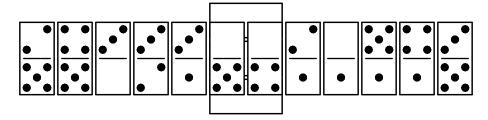
Problem 13

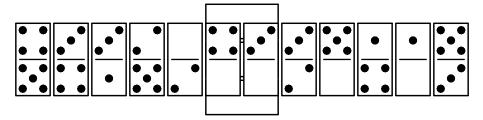


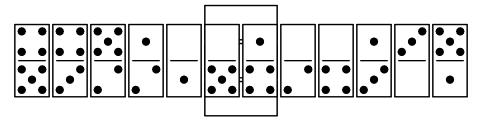
Problem 14



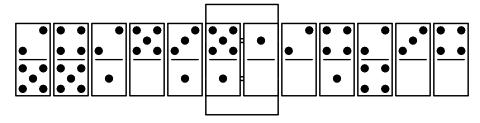
Problem 15



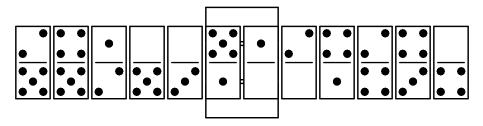




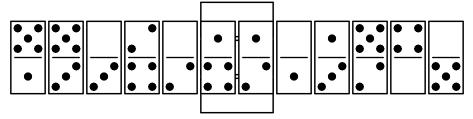
Problem 18



Problem 19



Problem 20



Solutions

Blocking Donimoes Solutions

Here are the solutions to the Blocking Donimoes problems. For each step, move the listed domino left, right, up, or down.

- 1. 24R, 24R, 23D
- 2. 24U, 02L, 02L, 02L, 24D, 46D
- 3. 53L, 53L, 63D, 24L, 34D, 24L, 24L, 24L, 34U, 63U, 30L, 53L
- 4. 20L, 63L, 62L, 54U, 20L, 63L, 62L, 05U, 20L, 20L, 20L, 05D, 54D, 63L, 62L
- 65L, 65L, 52D, 14D, 53D, 34D, 04R, 04R, 60U, 10U
- 6. 04D, 04D, 43R, 43R, 43R, 04U, 50U, 06L, 51U, 02L, 00U
- 7. 06L, 54L, 06L, 06L, 06L, 06L, 43U, 46L, 43U, 54L, 46L, 46L, 16U, 54L, 54L, 43D
- 22R, 22R, 22R, 22R, 34D, 50D, 54L, 25D, 50U, 54L, 54L, 34D, 46R, 54R, 54R, 50D, 46R, 46R, 34U
- 9. 21L, 06R, 16R, 21R, 62R, 64U, 64U, 24L, 62L, 04U, 04U, 11L, 11L, 13D, 03D
- 10. 43U, 31U, 43U, 31U, 43U, 31U, 43U, 31U, 43U, 31U, 43U, 25U, 30R, 53U, 30R, 25U, 53U, 53U, 00R, 25U
- 11. 23L, 52R, 12R, 34R, 23R, 23R, 05D, 10L, 40L, 45L, 60L, 41L, 64L, 65U, 65U, 52R, 12R, 34R
- 12. 12R, 66R, 10D, 16L, 63L, 12R, 54D, 63R, 16R, 10U, 66L, 62D, 10D, 16L, 12R, 63L, 60L, 12L, 16L, 10U
- 13. 11D, 22D, 11D, 22D, 40R, 40R, 63U, 63U, 20R, 50R, 01U, 21R, 21R, 01D, 50L, 23D, 61D, 20L, 63D, 63D, 40L, 40L, 22U, 11U
- 14. 31R, 40L, 44D, 46R, 31R, 23U, 56U, 55L, 55L, 33L, 33L, 63L, 63L, 54D, 54D, 11R, 11R, 44D, 25L, 25L, 41D, 25L, 44U, 11L, 11L, 54U, 54U, 63R, 33R, 55R
- 15. 55R, 21R, 65D, 65D, 33R, 33R, 43U, 66U, 45L, 25L, 35L, 00D, 44L, 44L, 44L, 11U, 61U, 00U, 35R, 25R, 45R, 66D, 65D, 21L, 55L, 11U, 61U, 13R, 32R, 40R, 43D, 33L, 22L, 05L
- 16. 32U, 42L, 46L, 32D, 12L, 56L, 50L, 52U, 52U, 20R, 20R, 04R, 04R, 34U, 13U, 55R, 55R, 66U, 55R, 13D, 55R, 34D, 04L, 20L, 52D, 04L, 20L, 52D, 50R, 56R, 12R, 32U, 66U, 26L, 33L, 45L, 46R, 42R
- 17. 45R, 42R, 02D, 42R, 06R, 06R, 64D, 64D, 11L, 51L, 66L, 11L, 51L, 66L, 10U, 10U, 42R, 42R, 61U, 14U, 35R, 25R, 45R, 65U, 65U, 65U, 40R, 45L, 25L, 14D, 35L, 42L, 61D, 42L, 62L, 33L, 10D, 10D, 66R, 51R, 11R
- 18. 60R, 53U, 53U, 43R, 15R, 60R, 40U, 40U, 25L, 25L, 46U, 42U, 05L, 41L, 13U, 13U, 41R, 05R, 42D, 46D, 32R, 61R, 03R, 25R, 25R, 40D, 40D, 60L, 15L, 43L
- 19. 41U, 22L, 35U, 35U, 13L, 13L, 66D, 40D, 43D, 66D, 40D, 43D, 60R, 60R, 55U, 55U, 52R, 62R, 10R, 05U, 45R, 61U, 05U, 64R, 61D, 45R, 64R, 64R, 45R, 05D, 45R, 05D, 10L, 62L, 52L, 55D, 55D, 60L, 60L, 43U, 40U, 66U
- 20. 53L, 66L, 23L, 53L, 22D, 22D, 60R, 44R, 50R, 60R, 42R, 44R, 50R, 42R, 33U, 33U, 66L, 66L, 51U, 52U, 54U, 55R, 55R, 11U, 11U, 01L, 65L, 63L, 64L, 16D, 20R, 16D, 40U, 41U, 16U, 20L, 40U, 41U, 16U, 64R, 63R, 65R, 55R, 54D, 01R, 11D, 52D, 51D, 66R, 66R, 33D, 33D, 42L, 50L, 44L, 60L

Capturing Donimoes Solutions

Here are the solutions to the Capturing Donimoes problems. For each step, move the listed domino left, right, up, or down. Then make captures for any matching numbers.

- 1. 10D, 14R, 23D, 14R
- 2. 60R, 10R, 12D, 12D, 53R
- 3. 21R, 34U, 45R, 34U, 16U
- 4. 03L, 46L, 05R, 34U, 45R, 46L, 45R
- 5. 54R, 20D, 46D, 06L, 36R
- 6. 34L, 64L, 55L, 35D, 50R, 60D
- 7. 61D, 43R, 55R, 53D, 53D, 20R, 36R
- 8. 26R, 24L, 65L, 01L, 30L, 06U, 30L
- 9. 40D, 65D, 54L, 01D, 36D, 15R, 23D
- 10. 30U, 56L, 30D, 10U, 10U, 63R, 30D, 41R, 60D, 25R, 41R, 41R
- 11. 21L, 23L, 60L, 05L, 65L, 33D, 42R, 42R, 01R, 30L, 60R
- 12. 30D, 54L, 20L, 54L, 54L, 20L, 20L, 64D, 25R, 15L, 15L, 12R
- 13. 63L, 01L, 50L, 50L, 21D, 66R, 64D, 40R, 40R, 15R, 43U
- 14. 50D, 45D, 36D, 22D, 66U, 46R, 46R, 60D, 30L, 01D, 01D, 26R, 12R
- 15. 12R, 44R, 44R, 33U, 20U, 05U, 46U, 56L, 56L, 30L, 45L, 15U, 36R, 15U
- 16. 21L, 61L, 04L, 04L, 20D, 15D, 52R, 01R, 32U, 46D, 65L, 41U, 34U, 01R, 35R
- 17. 54D, 60L, 60L, 25D, 02L, 02L, 01L, 01L, 55L, 62L, 11U, 11U, 40R, 44U, 46R, 22R, 46R, 22R, 16L
- 18. 61D, 60L, 60L, 31L, 31L, 03D, 04D, 10L, 54D, 26L, 10L, 26L, 24D, 51D, 51D, 41L, 36D, 41R, 34U, 34U, 12L, 20R, 34U
- 19. 41D, 30R, 12L, 61U, 61U, 20R, 26D, 13L, 34L, 06D, 34L, 55L, 35U, 35U, 11R, 64R
- 20. 25U, 40D, 10D, 63D, 60R, 60R, 32D, 20R, 31D, 65R, 62D, 21R, 51R, 34L, 53R, 51R

Fujisan Solutions

Here are the solutions to the Fujisan problems. To distinguish the four different pawns, the top left is labelled as a (P)awn, the bottom is a k(N)ight, the top right is a (B)ishop, and the bottom right is a (R)ook.

- NR4, NR2, PR2, PR1, PD, PR3(+1), BL1, BL2, BD, RL5(+3), RU, RR1, PU, BL3
- 2. NR1, NU, BL1, BD, BL3, RL4(+1), RU, BU, BL5(+1), RL5(+1), PR1(+3), NR2(+3), ND, PR2, RR3(+2), RD, BR3(+1)
- 3. NR5, NR4, RL4(+1), NL5(+1), NU, PR3(+1), NR1(+1), PD, PR4(+1), RR3(+1), RU, PU, NR4(+1), BL2(+3), RL2(+3), PL1(+2), PD, RD, NL2(+1), BL1(+1)
- 4. RL4, RL5, RU, PR4(+1), PD, RD, NR5(+2), NU, RR4(+1), RR3, RU, PU, PR5(+1), BL1(+2), PL4(+2), PD, PR4, PU, BL2(+2), BD, PL2(+1), RD, RL5
- 5. NR5, NL2, NL2, NU, RL3, RL5, RU, RL1, PR3(+2), PD, PR3, PU, NR3(+1), RR1(+1), NR4(+2), ND, PR4, NU, BL1(+2), NL1(+1), NL3(+1), NR1(+1), BD, BL4, PD, PL5
- 6. NR4, NU, NR1, NL2, ND, NL1, NU, PR2(+1), PD, ND, NR2(+1), NR5, NU, NL2, NR4, ND, PR2, PR5, PU, PL2, RL1(+1), RU, NU, BL3(+3), BD, NL3(+2), PL1(+1), RD, RL4(+1)
- BL1, BL2, BD, BL2, PR2, PR3, PD, PR4(+1), BR3(+1), RL2(+2), BL2(+2), BU, BL3, RU, RL5(+1), BL3(+1), BD, RD, PL2, PL5(+1), NR1(+3), RU, PU, PR4(+1), PD, RR4, NU, BU, BR3(+1), NR1(+1), ND, BR1
- RL3, RU, RL1, RL5, RL1, RR2, RL4, RD, NR1(+1), NU, RU, PR1(+2), RR2(+2), RD, NR2(+1), PD, PR4(+1), RR5(+1), RL2, ND, NR3(+2), RU, RR3, PU, PR3, NU, BL1(+3), PL1(+2), PL2, PR, NL2(+2), ND, BL2(+1), RD, RL5
- RL1, RL1, RU, RL2, RL4, RD, RL1, RU, PR4(+1), RD, RR5, RU, PR4(+1), PD, RL1, RR3, PU, BL2(+2), PL1(+1), RL4(+2), BL4(+2), PL5(+2), PD, RD, RL3, BD, NR1(+3), PU, PR5, PD, BU, RU, RR4(+1), RD, BR4, NL3, NU, NR5
- RL3, RU, RR2, RD, RL4, RL5, NR3(+1), NR4, NL5(+1), NU, RR2, RL4, RU, PR1(+2), PD, ND, RD, RR2(+2), NR4(+2), NU, NR1, ND, PR4(+1), RR3(+2), RU, NU, NR2(+1), PL5, PR2, PU, PR5(+1), BL1(+3), ND, NL4, NL1, RD, PD, PL3(+2), PU, PR, BL2(+1), RL3(+1)
- 11. NR5, NU, NL3, ND, NR2, NR4, NU, NR1, ND, NR1, RL4(+1), RR3(+1), NL5, RL4, RL4(+1), RU, RL2, NU, NL3, PR1(+2), RR2(+2), RD, NR2(+1), PD, PR4(+1), RR3(+1), PR1(+1), PU, RU, NR4(+2), BL2(+3), ND, NL4, BD, RD, PD, PL4(+3), NU, BR3(+1), BL5(+1), BU, PR4, RR3, RL5(+1)
- 12. RL3, RU, RL1, RL1, RD, RL5, RR2, RL4, NR3(+1), NR4, NL5, NR2, NU, NL3, RU, PR1(+2), PD, ND, RD, RR2(+2), NR4(+2), NU, NR1, ND, PR4(+1), RR3(+2), RU, NL5(+1), PU, NR2, NU, NR4(+2), ND, PR3(+1), NU, BL1(+3), ND, PD, PL5(+1), PU, NL5, RL1(+1), RD, BD, BL1(+1), BU, RL1
- 13. BL1, BD, BL1, BU, BL2, BL3, BD, BL3, BU, PR1, PR2(+1), PD, PR5, PL1, PR3, PU, PR1, PD, BR2, BD, BR5, BL1, BR3, RL1(+2), RU, BU, PU, PL2(+2), PL3, PD, PL4, BL2(+1), BL3, BD, RL2, RD, RL4(+1), RU, BL3, RD, NR2(+3), PR2(+3), PU, BR3(+2), RR2(+1), NL4, NU, NR5(+1)
- 14. NR3, NR2, NU, NL3, ND, NR2, NR5, NU, NR1, NR2, BL1(+1), NL1(+1), ND, NL2, NU, BL1, BL5(+1), BL1, BD, BR2, BU, ND, NR4, NU, NL1, NL1, NL5(+1), NL1, ND, NR2, BL4, NU, NL3, PR1(+2), PD, ND, BD, BR2(+2), NR5(+2), NU, PR5(+1), BR5(+1), NR1, ND, RL2(+3), RU, RL2, PL3, PR, NL3(+1), BU, BL4
- 15. PR3, PL2, PR3, PD, PR1, PU, PR5, PD, PL1, PU, PR3, PD, RL1(+1), PL1(+1), PL1, PU, RU, RL2(+1), PL3(+1), RL3(+1), RD, PR5, PL2, PD, PL5(+1), PU, RU, RL2(+1), RD, PD, NR2(+2), PU, PR3, PR5, PD, PL1, NU, RU, RR3(+1), NR5(+1), PU, RR4(+2), BL2(+3), ND, NR1, NL4, NU, RD, RL5, BD, PD, PL5(+2), PR4(+1), BL5(+2), RU, BR5
- 16. PR3, PD, PR2, PU, PL3, PR2, PR5, PD, PR3, PU, BL1(+1), PL1(+1), PD, BL3, BD, PL5(+1), PU, PR5, BU, BR1(+1), PD, BD, BL5(+1), BL1, BR2, BU, BL4, BD, PL5, PL1, PR2, PU, PL3, PD, NR1(+2), PR2(+1), NU, BU, BR2(+1), NR5(+1), ND, NR3, BR5, BD, PR4(+1), RL2(+3), PU, PL3, PD, BU, RU, RR1(+1), NU, NL4(+2), ND, BR1(+1), BL4(+1), RL3
- 17. RL3, RL2, RU, RL5, RR1, RD, RR1, RL3, NR2(+1), NU, RR2, ND, NR1(+1), NR4, NU, NR1, ND, NL2, RR4(+1), NU, NR3, ND, RU, RR1, RD, RR1(+1), RU, NU, BL1(+2), BD, ND, RD, RL2(+2), RU, RL5, RR1, RD, NL2(+1), NU, NL5, ND, BL2, BL5(+2), BU, NU, RR1, RL3, RU, PR1(+3), PD, PR1, PU, ND, NR4, NL, NU, PR1(+1), BD, BR5, RD, RR4(+1)
- 18. BL4, BL5, BD, BL1, BU, BL2, PR2(+1), BR3(+1), BR4, BL5, PL2, PR3(+1), BR4(+1), BD, PD, PR4(+1), PU, PL2, PD, BU, BL5, BD, PL5(+1), BL1, BU, BL2, BD, NR1(+2), PU, BU, BR3(+1), BR4, BD, PR3, PD, PR4(+1), PU, PL2, PD, BU, BL5, BD, NR1(+1), BR4(+2), BU, BL2, BR3, BD, NR4(+1), PU, PR4, PD, RL1(+3), RU, PU, PL5(+1), BU, BL2(+1), NU, NL1(+2), ND, RL1(+1), BD, BL1(+1)
- 19. BL4, BD, BL5, BU, BL1, BL2, BD, NR2(+1), BR3(+1), BU, BR4, BD, BL5, NU, NL2, ND, NR3(+1), NU, BU, BR4(+1), BD, ND, NR4(+1), NU, NL2, BL5, ND, NL5(+1), NU, BU, BL2(+1), PR1(+2), ND,

- BD, BR3(+1), BU, BR4, BD, PL2, PD, PR3(+1), PU, NR3, NR4(+1), NU, NL2, ND, BL3(+1), BR4(+1), BU, NU, PR4(+2), ND, NR4, PD, BD, RL1(+3), BU, NU, NL5(+1), BL2, BL1, BD, RL3(+1), PL5(+2), PR1(+1), RU, RR1(+1)
- 20. NR3, NR2, NÚ, NR5, ND, RL3(+1), NL1(+1), RL4(+1), RU, NU, NL5(+1), ND, RD, NR2(+1), NU, RU, RR5(+1), RL1, RD, RL1, RU, RL5(+1), ND, NL3, NL1, NU, PR2(+2), PD, NR2(+1), RD, RR2(+1), RU, NR5(+1), NL1, ND, PU, PR5(+1), PL1, NL1, NU, RR4(+2), RD, PD, PL1, PL4, PU, NL5(+1), PD, ND, NR2(+1), NU, PU, PR5(+1), PD, ND, NR5(+2), NU, PU, RU, BL1(+3), BD, PD, PL2(+1), PU, BL2, RD, ND, NL4(+2), NU, RL4(+1)

Contributing

Found some interesting problems to solve? Ideas to share? Get in touch at donkirkby.github.com/donimoes.

Capturing and Blocking Donimoes are original puzzles designed by Don Kirkby.