Intermediate TripleCross Puzzles

Copyright © 2023 Neil Aggarwal, all rights reserved.

Instructions

This puzzle is like a crossword, but with numbers. Each digit occupies a hexagonal cell and can be a part of a "word" in the across, up, and down directions.

Rules:

- 1. "Words" may not start with a zero.
- 2. "Words" in the 'across' direction read from left to right.
- "Words" in the 'up' direction read along the upward diagonal to the right.
- 4. "Words" in the 'down' direction read along the downward diagonal to the right.
- 5. There is one unique solution which satisfies all the clues given below.

Across Down

Some "words" may not have clues. They will be determined by the "words" which intersect them.

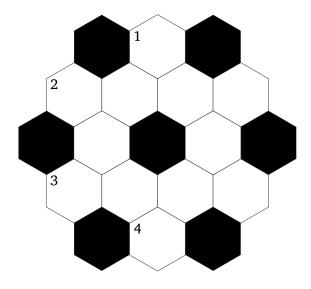
For More Puzzles

Please visit http://3DMathPuzzles.com for more TripleCross, CrossFigure, and 3D puzzles!

About the Author

Neil Aggarwal loves puzzles. Sometimes he is solving an existing puzzle, sometimes he is figuring out how to create new ones. Computer programming is always a good source of puzzles. So is using a new ingredient or making a new recipe. Sometimes the puzzle is to figure out how to get his 4x4 vehicle across a challenging trail. Life is full of puzzles, and he enjoys all of them. He also loves spending time with his family, friends, and dogs -- who, at times, are puzzles too!





Across

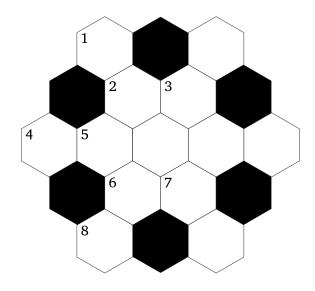
2 Three-fifths of 4 up

3 Three hundred eighty-one less than **4** Fifty-five times a square **3** up

Up 3 A prime number

- 1 Half of 3 across, then subtract 2 down
- **2** Three hundred twenty-five more than 2 across





Across

2 A prime number4 Fifty-seven times a prime number6 Seven times a square

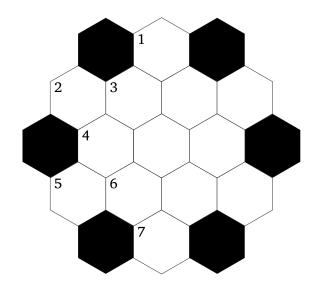
Up

57 up minus 5 down7 Six times a prime number8 Forty-two times a prime number

Down

1 4 across plus half of 8 up3 Five times 5 up5 6 across minus 2 across





Across

26 up plus 4 across4 Twenty-six times a square5 Twice a prime number

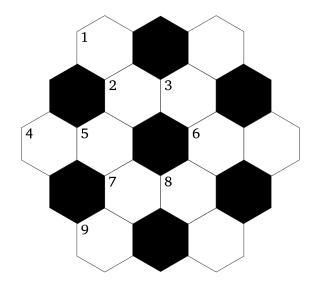
Up

⁵ Mean of 5 across and 6 up⁶ Forty-eight times a prime number⁷ Twenty-four times a prime number

Down

Fifty-one times a square
 Mean of 7 up and 4 across
 Thirty-five times a square





Across

- 28 down reversed
- 42 across divided by four
- 6 Four times a prime number
- 7 Twice the result of 8 down minus 4 across

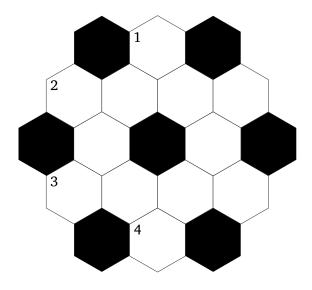
Up

- 3 Mean of 1 down and 5 up
- 5 A prime number
- 87 across reversed
- 9 Half of 6 across, then subtract 1 down

Down

1 A cube3 Mean of 2 across and 3 up5 All digits are the same8 2 across reversed



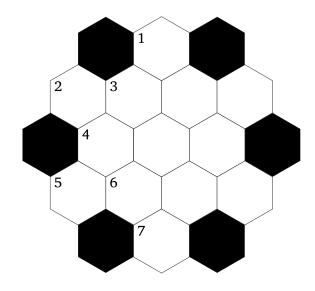


Across Up Down 2 One hundred twenty-three less than 31 down minus 2 across 2 down **3** Three-fifths of 2 down 4 Sixteen times a prime number

1 Nine times a prime number

2 Two hundred thirty-seven less than 4 up





Across

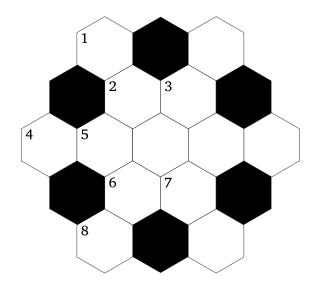
- **2** Fourteen times a prime number
- 45 across minus half of 2 across
- 5 Three hundred twenty-three less than 5 up

Up

- 5 A square
- 6 A prime number
- 7 One thousand seven hundred fifty more than 2 across

- 1 Sixty-one times a square
- **2** A prime number
- 3 Ten times a square





Across

2 5 up reversed4 Ninety-two times a prime number6 All digits are the same

Up

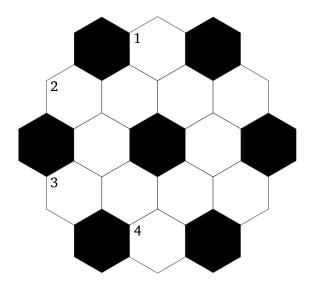
5 2 across reversed 7 Four times 3 down

81 down minus half of 4 across

Down

1 Nineteen times a prime number 3 Half of 6 across, then subtract 5 up 5 Two-thirds of 2 across





Across

2 Half of 1 down, then subtract 2 down

3 A square

Up

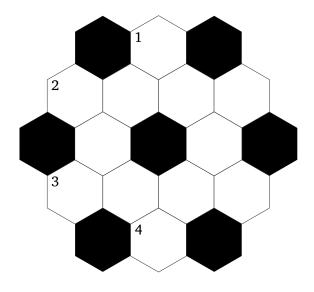
- **3** One thousand five hundred eightyseven less than 4 up
- 4 Two thousand two hundred ninetyeight more than 1 down

Down

1 Forty-two times a prime number

2 Twenty-three times a prime number





Across

2 A square 3 Five times a prime number

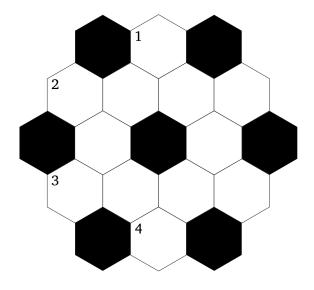
Up

3 A prime number4 Half of 2 down, then subtract 1 down

Down

1 Twenty-five times a prime number 2 Nine hundred ninety-nine less than 3 up





Across

2 2 down reversed

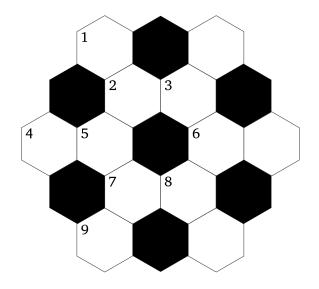
3 Seventy times a prime number

Up

- 3 Seven hundred forty-six more than 3 across
- 43 across minus half of 1 down

- **1** Ten times a prime number
- 2 Nine hundred ninety-five less than 1 down





Across

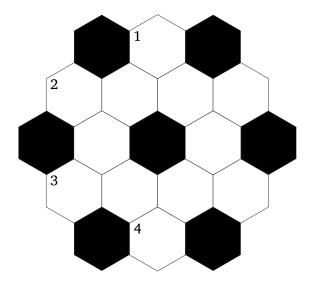
2 5 up minus 4 across
4 A square
6 4 across plus 3 up
7 A prime number

Up

3 Mean of 5 down and 6 across 5 A square 8 Mean of 8 down and 1 down 9 A cube

- 1 Mean of 8 up and 3 down
- 3 A prime number
- 5 A square
- 8 Twice the result of 1 down minus 7 across





Across

2 A prime number

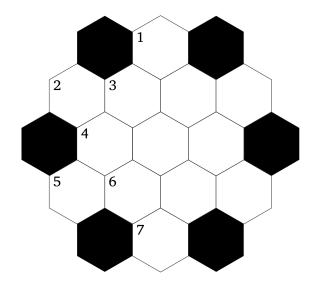
3 Two hundred eighty-three less than **4** Ninety-one times a prime number **3** up

3 A prime number

Up

- 1 Two thousand one hundred ninety-seven more than 4 up
- 2 Half of 1 down, then subtract 3 across





Across

- 2 Four hundred twenty less than 2 down
- **4** Twenty-four times a prime number
- 5 A prime number

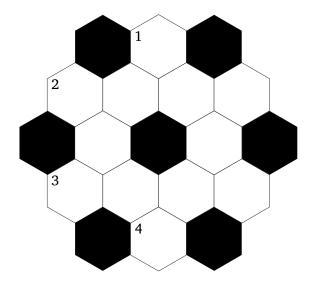
Up

5 Half of 2 down, then subtract 6 up

- 6 First two digits are the same as first two digits of 7 up
- 7 Half of 2 across, then subtract 1 down

1 Twenty-one times a square
2 Twice a prime number
3 Five times a prime number





Across

2 4 up minus half of 1 down

3 Sixty-three more than 3 up

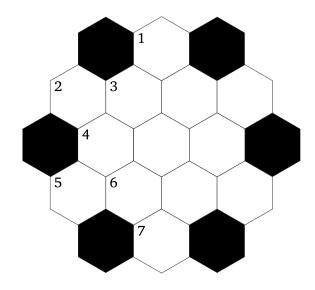
Up 3 Nine times a prime number

4 Thirty-nine times a prime number

Down

 Two thousand four hundred fortyseven less than 3 up
 Two-fifths of 3 across





Across

2 Sixty-eight times a prime number

4 Ten times a prime number5 Fifty-seven times a prime number

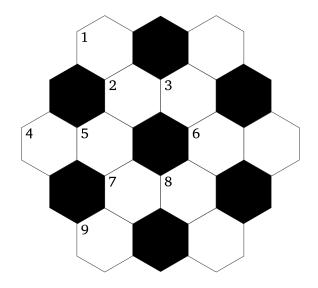
5 Rearranged digits of 2 down

Up

6 Four times a prime number7 Four times a prime number

- 1 Half of 2 across, then subtract 3 down
- **2**5 across plus half of 4 across
- **3** Three times a prime number





Across

2 Mean of 6 across and 3 down
4 5 up reversed
6 Twice 7 across
7 All digits are the same

Up

3 5 down minus 7 across5 2 across plus half of 1 down

8 Ten more than 3 down

97 across plus 3 up

Down

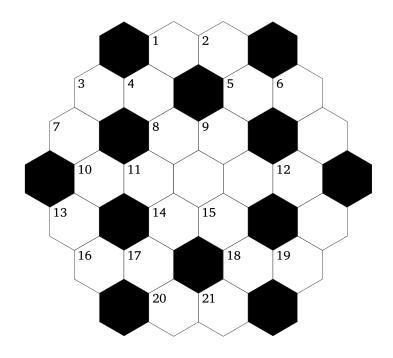
19 up minus 8 up

3 Half of 5 up

51 down plus 8 up

8 Twice the result of 6 across minus 4 across

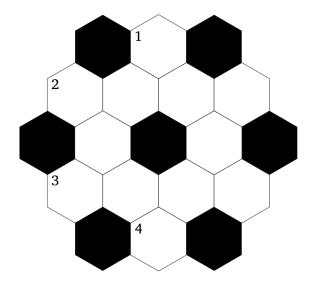




Across

Across	Up	Down
18 across minus 12 down	45 across minus 13 down	2 A square
3 Five times 1 across	7 Same as 14 across	4 First two digits are the same as 3 across
513 up plus 4 up	11 Mean of 14 across and 3 across	6 5 across reversed
8 Twice the result of 2 down plus 13 down	12 21 up minus 6 down	7 Four-fifths of 7 up
10 Eight times a prime number	13 Half of 12 up, then subtract 1 across	9 Five times 13 up
14 Mean of 20 across and 7 down	15 Mean of 21 up and 20 across	11 Mean of 15 up and 13 up
16 Half of 21 up, then subtract 20 across	17 Its digits total 18 across	127 up plus half of 9 down
18 Mean of 11 down and 14 across	194 up minus 2 down	13 19 up minus 18 across
20 Half of 6 down	21 11 down plus 4 up	17 21 up minus 4 up





Across 2 Ninety-nine more than 2 down

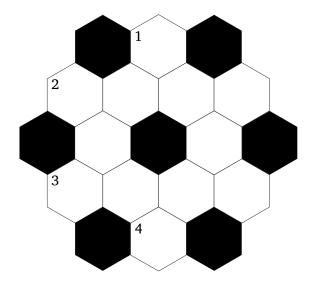
3 A palindrome

Up3 Half of 4 up, then subtract 1 down4 Forty-four times a prime number

Down

1 One thousand two hundred seventeen less than 2 across2 A prime number



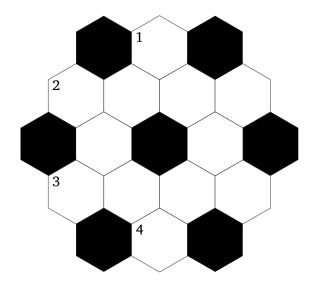


Across

2 Twice a square3 Three more than 3 up

Up 3 2 down reversed 4 Eighty times a prime number Down 1 3 across minus half of 4 up 2 A prime number





Across

2 Thirty-six times a prime number3 Two hundred ninety-eight more than 4 up

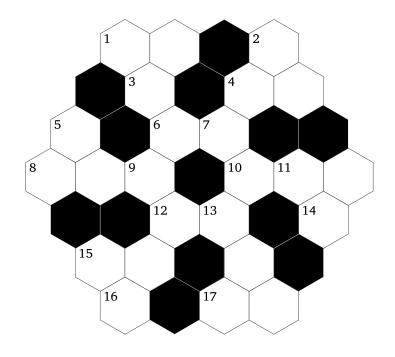
Up

3 A square4 Half of 1 down, then subtract 2 down

Down 1 Twice a prime number

2 A prime number





Across

- 1 Twice the result of 15 down plus 14 3 17 up plus 2 down up 48 up minus 5 down 61 across minus 9 up 8 A prime number
- 10 Sixty-one times 17 across
- 12 1 across minus 9 down
- 15 A square
- 17 Half of 4 across, then subtract 5 down

Up

- 7 13 down minus 17 up 8 Twice the result of 9 up plus 6 across 9 Same as 9 down 13 A square 14 2 down minus 17 up
- 16 12 across times 11 down
- 17 2 down minus 17 across

Down

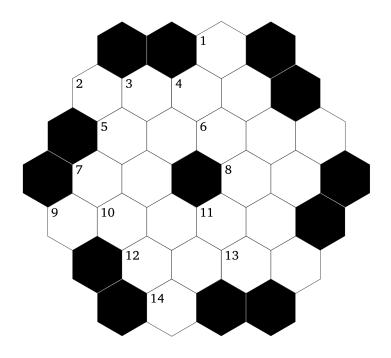
1 A prime number

2 Mean of 3 up and 14 up 59 up plus 11 down

7 A square

9 Mean of 14 up and 15 across **11** 16 up divided by 6 across 13 Thirty-eight times 14 up 15 1 across minus 6 across





Across

- 2 Forty-six times 8 across5 Eight times a prime number
- 712 up minus 11 down
- 8 A prime number
- 9 Twice a prime number

12 Sixty-nine times a prime number

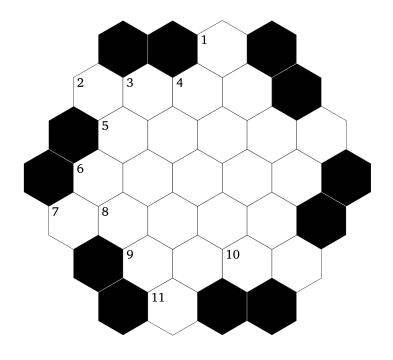
- F	
6 A square	1 Nine tim
9 Three times a square	2 10 up mi
10 Twice a prime number	3 Twelve t
12 A prime number	4 Three tin
13 Twice the result of 14 up minus 12 across	7 Mean of
14 Five times a prime number	11 Three-for

Down

Nine times a prime number
 10 up minus 6 up
 Twelve times a prime number
 Three times a prime number
 Mean of 9 up and 7 across

11 Three-fourths of 3 down





Across

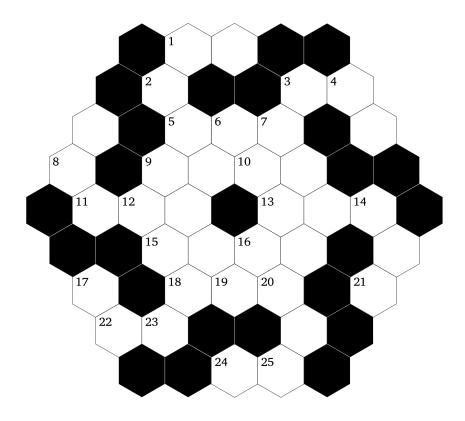
- **2** Twice the result of 7 up minus 10 up
- 5 A prime number
- 6 Fifty times a prime number
- 7 Six thousand one hundred three more than 2 down
- 9 Fourteen times a prime number

Up

- 7 Eighty-two times a prime number
- 8 Twice the result of 5 across plus 9 across
- **9** Twice the result of 4 down minus 11 up
- 10 Twenty-nine times a prime number
- 11 Eight thousand four hundred two less than 5 across

- 1 One thousand four hundred twelve more than 7 up
- **2** Three times a prime number
- ³ Twenty thousand five hundred ninety-six more than 4 down
- 4 Twice a prime number
- 6 Nine times a prime number





Across

- 1 Twice 4 down
- **3** Half of 9 across, then subtract 6 down
- 5 Mean of 1 across and 16 down
- **9** Twenty times a prime number
- **11** A prime number
- **13** 12 up minus 21 up
- 15 Twenty-four times a prime number 20 Five times a prime number
- 18 A prime number
- 22 13 across minus half of 12 down
- **24** 16 down minus half of 14 down

Up

2 24 across divided by five 8 Mean of 24 across and 2 up

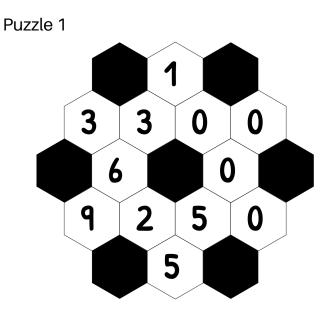
- 10 Twenty-one less than 11 across
- 12 Rearranged digits of 16 down
- **15** Eighty-seven times a prime number
- 19 Forty times a prime number
- 21 A cube
- **23** Twice a prime number
- 25 2 down minus 21 up

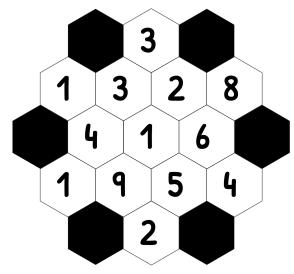
Down

21 across plus half of 25 up 45 across minus 17 down

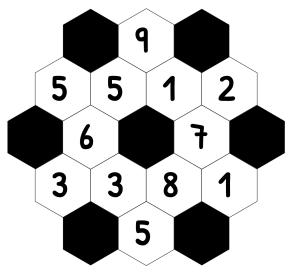
- 6 Twice a prime number 7 Fifteen times a prime number 89 down divided by 8 up **9**8 up times 25 up 12 18 across minus 13 across 14 Two-thirds of 5 across
- 16 Twice 17 down
- **17** All digits are the same

Solutions

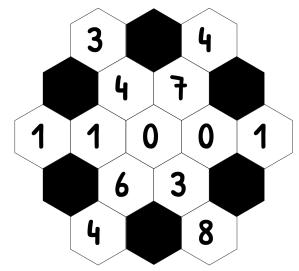




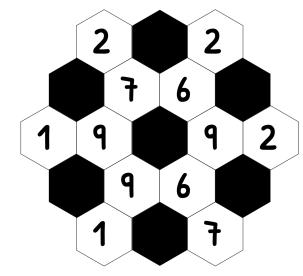
Puzzle 5



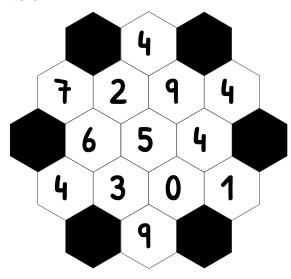
Puzzle 2

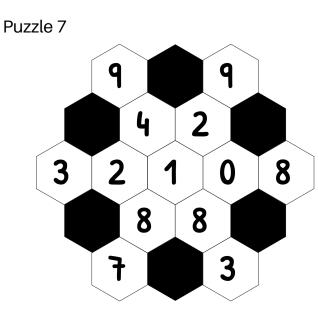


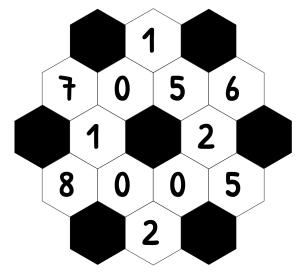
Puzzle 4

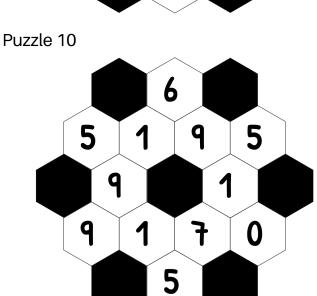


Puzzle 6

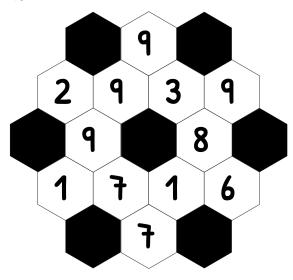




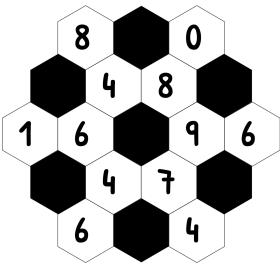




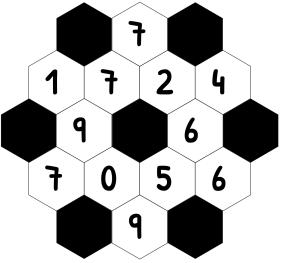
Puzzle 12



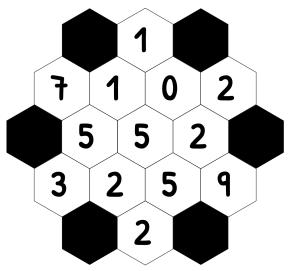
Puzzle 11



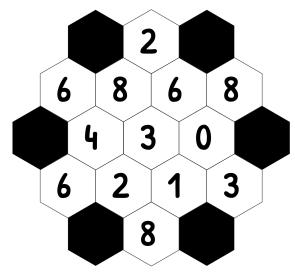
Puzzle 8



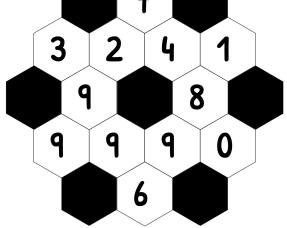




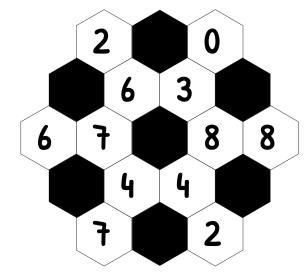
Puzzle 17



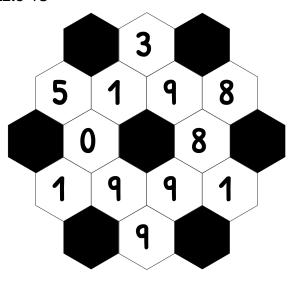
Puzzle 14

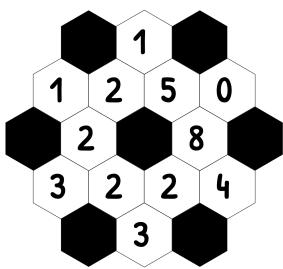


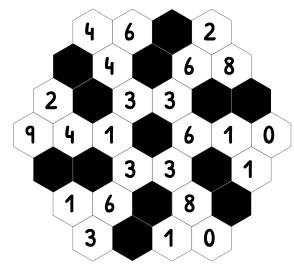
Puzzle 16



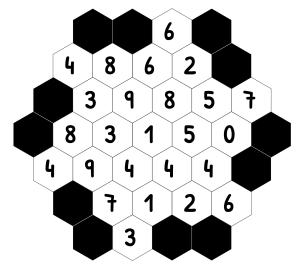
Puzzle 18



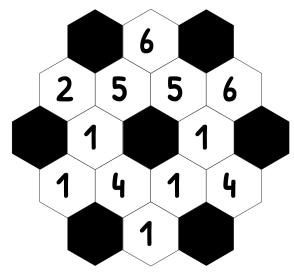




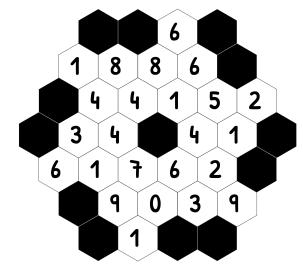
Puzzle 23



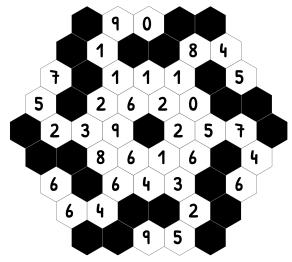
Puzzle 20



Puzzle 22

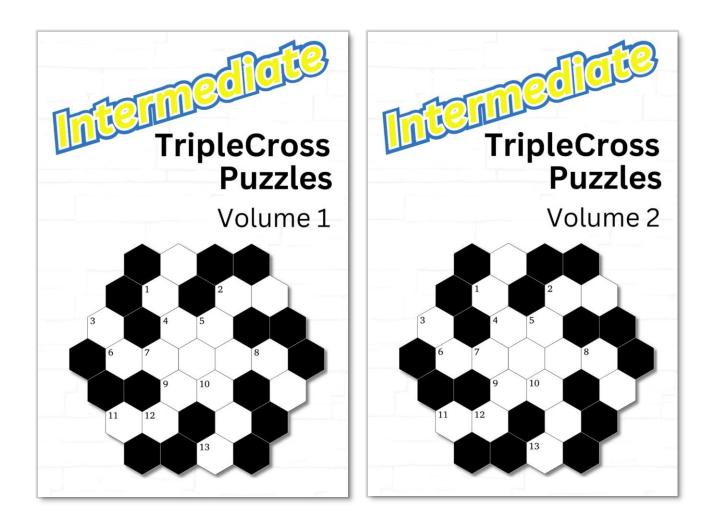


Puzzle 24



Want More Puzzles?

Check out these books on Amazon:



Acknowledgements

This book could not be possible without a lot of help, especially from the following:

Jim Bumgardner (krazydad) whose excellent site http://krazydad.com provided many hours of enjoyment and inspired me to create puzzles of my own. He has also been very generous providing tips and support.

Yochanan Dvir whose cross-figure puzzles formed the reference material for the puzzles.

Jared McComb (bosuonparedo) who started me down the path to create the hexagonal puzzles.

Phil Bordelon (Sunfall) who suggested the name TripleCross.

Dave Millar (Taco Dave) who suggested I create books.

All the users on the krazydad discord server who tested the puzzles and gave feedback.

Norma for her suggestions and editing help.

Sora Sagano for the Aileron font.

Charis SIL font Copyright (c) 1997-2022 SIL International (http://www.sil.org/) with Reserved Font Names "Charis" and "SIL". Licensed under the SIL Open Font License, Version 1.1, available at http://scripts.sil.org/OFL

Patrick Hand font Copyright (c) 2010-2012 Patrick Wagesreiter (mail@patrickwagesreiter.at), licensed under the SIL Open Font License, Version 1.1, available at http://scripts.sil.org/OFL

UXWing.com for the star icons.

All trademarks and copyrights are the property of their respective owners.