

CODE BREAKERS

LEVEL
B

Break the Color Code with Math and Logic



MindWare®
brainy toys for kids of all ages®

for other MindWare products visit
www.mindware.com

A MindWare® Original!

Our entire selection of Brainy Toys for Kids of All Ages® is available at www.mindware.com, or by calling us at 800-999-0398 to request a catalog.

Coloring Books

Each of our coloring books offers one-of-a-kind patterns, textures and styles you make your own by choosing how to bring them to life.

Animal Habitats Series

Creature Camouflage Series

Designs Series

Illuminations Series

Lights Series

Modern Patterns Series

Mosaics Series

Quilts Series

Scapes Series

Transformations Series

Puzzle Books

Our puzzle books build skills in many areas—from logic to math, spatial reasoning to verbal skills.

Analogy Challenges

Analogy Crosswords

Clip Clue Puzzles

Code Breakers

Deducibles

Directive Detective

Extreme Dot to Dot

Fast Facts Trivia

Grid Perplexors

Letter Links

Logic Links

Math Mosaics Series

Math Path Puzzles

Math Perplexors

Noodlers

Number Circuits

Number Junctions

Perplexors

Sequencers

Tactic Twisters

Tan-Tastic Tangrams

Venn Perplexors

Word Winks

Word Wise

Games and Activities

Building blocks to strategic games, mystery puzzles to imaginative play — enhance abstract thinking and reasoning skills with our ingenious games and activities.

Bella's Mystery Decks

Blik-Blok

Block Buddies

Chaos

Cross-Eyed

CrossWise

Dizios

Flip 4

Gambit

Guacamole

Hue Knew?

Hue Knew? On the Go!

Loose Change

Logic Links Game

Make Your Own Mask Kit

Noodlers Game

Pattern Play

Q-bitz

Qwirkle

Qwirkle Cubes

Squzzle Puzzles

Talk In Text

Tally Rally

Up for Grabs!

Zenith

© 2006 MindWare Holdings, Inc.

Individual Puzzles by Howard Tray
Instructions and Editing by Eric Benjamin
Design by Kristine Mudd

All rights reserved. Printed in the U.S.A.

Limited reproduction permission.
The publisher grants permission to reproduce up to 100 copies of any part of this book for noncommercial classroom or individual use. Any further duplication is prohibited.

ISBN 978-1-933054-32-2



MindWare®
brainy toys for kids of all ages®

for other MindWare products visit
www.mindware.com

INSTRUCTIONS

There are a few things to remember when solving Code Breakers puzzles:

- All the colors represent positive numbers; there are no negative numbers in the puzzle solutions.
- All of the colors represent whole numbers; there are no fractions in the puzzle solutions.
- None of the colors equal zero.

SAMPLE PUZZLE

Code Breaker puzzles can be solved by breaking down the larger puzzle into several small steps. Consider this sample puzzle:

$$\begin{aligned} \text{Purple} + \text{Light Blue} + \text{Purple} &= 18 \\ \text{Light Blue} + \text{Purple} &= 13 \\ \text{Green} + \text{Green} + \text{Green} &= 12 \\ \text{Green} + \text{Light Blue} &= \text{Yellow} \end{aligned}$$

If you can find the value of one color, you can help replace that color with its value in every clue.

HINT: You can even replace multiple colors in one clue with values you know from the other clues.

In the sample puzzle, the second clue tells you that $\text{Light Blue} + \text{Purple} = 13$. Even though you don't know the value of Light Blue or Purple yet, you can use that information in other clues. Look for places that have $\text{Light Blue} + \text{Purple}$.

In the first clue, you can replace $\text{Light Blue} + \text{Purple}$ with the value you already know, so you end up with the following equation:

$$\begin{aligned} \text{Purple} + \text{Light Blue} + \text{Purple} &= 18 \\ \text{Purple} + 13 &= 18 \quad \text{Replace } \text{Light Blue} + \text{Purple} \text{ with } 13. \end{aligned}$$

HINT: You can simplify problems by performing the same operation on both sides.

$$\begin{aligned} \text{Purple} + 13 - 13 &= 18 - 13 \quad \text{Subtract 13 from each side of the equation.} \\ \text{Purple} &= 18 - 13 \quad \text{The numbers on the left side cancel each other out.} \end{aligned}$$

So Purple equals 5.

Now you can replace Purple in each clue with its value of 5.

The second clue can be solved now, using the same steps.

$$\begin{aligned} \text{Light Blue} + 5 &= 13 \quad \text{Replace } \text{Purple} \text{ with } 5. \\ 5 + \text{Light Blue} - 5 &= 13 - 5 \quad \text{Subtract 5 from each side of the equation.} \end{aligned}$$

$$\text{Light Blue} = 13 - 5 \quad \text{The numbers on the left side cancel one another out.}$$

So Light Blue equals 8.

Now solve the third clue.

Notice that each side of the clue is divisible by 3. Remember, you can perform the same operation on both sides.

$$\begin{aligned} \text{Green} + \text{Green} + \text{Green} &= 12 \\ \text{Green} + \text{Green} + \text{Green} \div 3 &= 12 \div 3 \quad \text{Divide each side of the equation by 3.} \\ \text{Green} &= 12 \div 3 \end{aligned}$$

So Green equals 4.

Now you know enough to solve the final clue.

$$4 + 8 = \text{Yellow} \quad \text{Replace } \text{Green} \text{ with } 4 \text{ and } \text{Light Blue} \text{ with } 8.$$

So Yellow equals 12.

You've solved the problem!

$$8 + 5 + 4 = 12$$

Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 1

$$\text{Blue} + \text{Blue} + \text{Purple} + \text{Purple} = 14$$

$$\text{Purple} + \text{Blue} + \text{Green} + \text{Orange} = 13$$

$$\text{Purple} + \text{Purple} + \text{Orange} + \text{Green} = 18$$

$$\text{Blue} + \text{Blue} + \text{Green} = 6$$

$$\text{Blue} + \text{Orange} = \text{Yellow}$$

SOLUTION



PUZZLE 2

$$\text{Orange} + \text{Orange} + \text{Blue} = 17$$

$$\text{Green} + \text{Purple} + \text{Purple} + \text{Blue} = 9$$

$$\text{Purple} + \text{Green} + \text{Green} + \text{Purple} = 10$$

$$\text{Purple} + \text{Blue} + \text{Purple} + \text{Blue} + \text{Purple} = 9$$

$$\text{Purple} + \text{Blue} + \text{Green} + \text{Orange} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 3

$$\text{Blue} + \text{Purple} = 12$$

$$\text{Blue} + \text{Green} = 11$$

$$\text{Green} + \text{Purple} = 9$$

$$\text{Blue} + \text{Purple} + \text{Green} = \text{Orange}$$

SOLUTION



PUZZLE 4

$$\text{Green} + \text{Green} + \text{Blue} = 9$$

$$\text{Purple} + \text{Purple} + \text{Orange} + \text{Green} = 7$$

$$\text{Purple} + \text{Blue} + \text{Orange} + \text{Green} = 11$$

$$\text{Blue} + \text{Purple} + \text{Purple} + \text{Blue} = 12$$

$$(\text{Orange} \times \text{Orange}) + \text{Purple} = \text{Orange}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 5

$$\text{Blue} + \text{Purple} = 10$$

$$\text{Green} + \text{Blue} = 7$$

$$\text{Purple} + \text{Green} = 9$$

$$\text{Blue} + \text{Green} + \text{Purple} = \text{Orange}$$

SOLUTION



PUZZLE 6

$$\text{Red} + \text{Blue} + \text{Red} + \text{Blue} = 20$$

$$\text{Green} + \text{Purple} + \text{Red} + \text{Purple} + \text{Green} = 20$$

$$\text{Purple} + \text{Purple} + \text{Green} + \text{Green} + \text{Purple} = 19$$

$$\text{Purple} + \text{Green} + \text{Green} + \text{Purple} + \text{Green} = 16$$

$$\text{Purple} + \text{Blue} + \text{Red} + \text{Green} = \text{Orange}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 7

SOLUTION



$$\text{Red} + \text{Red} + \text{Red} = 9$$

$$\text{Red} + \text{Blue} + \text{Blue} = 7$$

$$\text{Red} + \text{Red} + \text{Blue} + \text{Blue} + \text{Green} + \text{Green} = 20$$

$$\text{Green} \times \text{Red} \times \text{Blue} = \text{Yellow}$$

PUZZLE 8

SOLUTION



$$\text{Blue} + \text{Purple} = 11$$

$$\text{Blue} + \text{Green} = 16$$

$$\text{Purple} + \text{Green} = 13$$

$$\text{Purple} + \text{Blue} + \text{Green} + \text{Red} = 25$$

$$\text{Red} + \text{Red} = \text{Yellow}$$

Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 9

$$\text{Blue} + \text{Purple} + \text{Green} = 14$$

$$\text{Orange} + \text{Purple} + \text{Green} = 13$$

$$\text{Blue} + \text{Orange} + \text{Orange} = 7$$

$$\text{Purple} + \text{Green} + \text{Green} + \text{Green} = 25$$

$$\text{Purple} + \text{Purple} = \text{Orange}$$

SOLUTION



PUZZLE 10

$$\text{Purple} + \text{Green} = 22$$

$$\text{Blue} + \text{Purple} = 25$$

$$\text{Green} + \text{Blue} = 19$$

$$\text{Blue} + \text{Green} + \text{Purple} = \text{Orange}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 11

SOLUTION

$$\text{Blue} + \text{Purple} = 13$$

$$\text{Green} + \text{Blue} = 15$$

$$\text{Purple} + \text{Green} = 10$$

$$\text{Blue} + \text{Purple} + \text{Green} = \text{Orange}$$



PUZZLE 12

SOLUTION

$$\text{Purple} + \text{Blue} + \text{Blue} = 13$$

$$\text{Orange} + \text{Orange} + \text{Green} + \text{Blue} = 14$$

$$\text{Purple} + \text{Blue} + \text{Green} + \text{Purple} = 12$$

$$\text{Purple} + \text{Purple} + \text{Green} + \text{Green} + \text{Green} + \text{Purple} = 12$$

$$\text{Purple} + \text{Blue} + \text{Orange} + \text{Green} = \text{Orange}$$



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 13

$$\text{Green} + \text{Blue} + \text{Green} = 14$$

$$\text{Purple} + \text{Green} + \text{Red} = 14$$

$$\text{Blue} + \text{Blue} + \text{Blue} + \text{Blue} + \text{Blue} + \text{Green} + \text{Purple} = 21$$

$$\text{Purple} + \text{Green} + \text{Blue} + \text{Blue} + \text{Purple} + \text{Green} = 26$$

$$(\text{Red} \times \text{Red}) + \text{Green} = \text{Orange}$$

SOLUTION



PUZZLE 14

$$\text{Purple} + \text{Blue} + \text{Green} = 15$$

$$\text{Purple} + \text{Purple} + \text{Blue} + \text{Blue} = 20$$

$$\text{Blue} + \text{Green} + \text{Blue} + \text{Blue} + \text{Green} = 13$$

$$\text{Purple} + \text{Purple} = \text{Orange}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 15

 +  +  +  = 24

 +  +  +  = 16

 -  +  +  = 10



$\left(\text{green circle} \times \text{green circle} \right) + \text{purple circle} = \text{orange circle}$

SOLUTION



PUZZLE 16

 +  +  = 9

 +  +  +  = 17

 +  +  +  = 24

 +  +  +  = 22

 +  +  +  +  = 

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 17

$$\text{Blue} + \text{Purple} + \text{Green} = 16$$

$$\text{Blue} + \text{Blue} + \text{Blue} - \text{Green} = 21$$

$$\text{Green} + \text{Blue} - \text{Purple} = 6$$

$$\text{Blue} + \text{Green} + \text{Blue} + \text{Blue} = 27$$

$$\text{Green} + \text{Green} + \text{Red} + \text{Red} = 10$$

$$\text{Purple} + \text{Red} + \text{Red} = \text{Yellow}$$

SOLUTION



PUZZLE 18

$$\text{Blue} + \text{Green} - \text{Purple} = 5$$

$$\text{Red} + \text{Red} + \text{Blue} + \text{Green} = 21$$

$$\text{Blue} + \text{Green} + \text{Green} + \text{Green} + \text{Blue} = 26$$

$$\text{Blue} + \text{Green} + \text{Purple} = 17$$

$$\text{Red} + \text{Green} + \text{Green} + \text{Green} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 19

$$\text{Blue} + \text{Purple} + \text{Green} = 15$$

$$\text{Orange} + \text{Orange} + \text{Purple} + \text{Blue} = 18$$

$$\text{Blue} + \text{Purple} - \text{Green} = 5$$

$$\text{Purple} + \text{Purple} + \text{Blue} = 13$$

$$\text{Orange} + \text{Blue} + \text{Blue} - \text{Green} = \text{Yellow}$$

SOLUTION



PUZZLE 20

$$\text{Purple} - \text{Orange} = 3$$

$$\text{Green} + \text{Purple} + \text{Green} + \text{Purple} = 30$$

$$\text{Blue} + \text{Green} + \text{Purple} + \text{Blue} = 21$$

$$\text{Blue} + \text{Blue} + \text{Orange} + \text{Orange} = 14$$

$$\text{Green} + \text{Blue} + \text{Orange} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 21

$$\text{Blue} - \text{Purple} + \text{Green} = 5$$

$$\text{Blue} + \text{Purple} + \text{Green} = 15$$

$$\text{Purple} + \text{Orange} + \text{Purple} + \text{Orange} = 12$$

$$\text{Blue} + \text{Blue} + \text{Green} = 18$$

$$\text{Purple} + \text{Orange} + \text{Blue} = \text{Yellow}$$

SOLUTION



PUZZLE 22

$$\text{Purple} + \text{Purple} + \text{Blue} = 10$$

$$\text{Green} + \text{Blue} + \text{Green} = 18$$

$$\text{Green} + \text{Purple} + \text{Purple} = 13$$

$$\text{Green} - \text{Orange} = 2$$

$$\text{Orange} + \text{Orange} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 23

$$\text{Blue} + \text{Purple} + \text{Green} = 14$$

$$\text{Blue} + \text{Purple} + \text{Purple} + \text{Purple} = 13$$

$$\text{Purple} + \text{Blue} + \text{Purple} = 10$$

$$\text{Green} \times \text{Red} = 14$$

$$\text{Red} \times \text{Red} \times \text{Red} = \text{Yellow}$$

SOLUTION



PUZZLE 24

$$\text{Red} + \text{Green} + \text{Purple} = 8$$

$$\text{Blue} + \text{Green} + \text{Green} + \text{Green} = 10$$

$$\text{Blue} + \text{Green} + \text{Green} + \text{Blue} = 12$$

$$\text{Purple} + \text{Purple} + \text{Blue} + \text{Blue} = 10$$

$$\text{Red} + \text{Red} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 25

$$\text{Blue} + \text{Purple} + \text{Green} = 10$$

$$\text{Purple} + \text{Green} + \text{Green} + \text{Purple} = 14$$

$$\text{Blue} + \text{Purple} - \text{Green} = 8$$

$$\text{Blue} + \text{Purple} + \text{Purple} = 15$$

$$\text{Green} + \text{Green} = \text{Orange}$$

SOLUTION



PUZZLE 26

$$\text{Purple} + \text{Red} + \text{Purple} = 18$$

$$\text{Green} + \text{Red} + \text{Green} + \text{Red} = 24$$

$$\text{Blue} + \text{Blue} + \text{Purple} + \text{Red} = 15$$

$$\text{Blue} + \text{Purple} + \text{Red} + \text{Green} = 18$$

$$\text{Purple} + \text{Purple} + \text{Green} + \text{Blue} + \text{Green} + \text{Red} + \text{Red} = 35$$

$$\text{Green} + \text{Purple} + \text{Purple} = \text{Orange}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 27

SOLUTION



$$\text{Purple} + \text{Light Blue} + \text{Purple} = 15$$

$$\text{Light Green} + \text{Light Blue} + \text{Light Blue} + \text{Light Green} + \text{Light Green} = 27$$

$$\text{Light Blue} + \text{Purple} + \text{Purple} + \text{Light Green} + \text{Light Blue} + \text{Light Green} + \text{Red} = 34$$

$$\text{Light Blue} + \text{Purple} + \text{Purple} + \text{Red} + \text{Light Blue} = 20$$

$$\text{Light Blue} + \text{Purple} + \text{Light Green} + \text{Red} = 18$$

$$\text{Light Green} + \text{Light Blue} + \text{Light Blue} = \text{Light Orange}$$

PUZZLE 28

SOLUTION



$$\text{Light Blue} + \text{Purple} + \text{Red} = 16$$

$$\text{Purple} + \text{Light Blue} + \text{Purple} + \text{Light Blue} + \text{Purple} = 31$$

$$\text{Light Blue} + \text{Purple} - \text{Red} = 10$$

$$\text{Light Green} + \text{Light Blue} + \text{Purple} + \text{Light Green} = 21$$

$$\text{Light Green} \times \text{Light Green} = \text{Light Orange}$$

Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 29

$$\text{Green} + \text{Blue} + \text{Green} = 16$$

$$\text{Purple} + \text{Purple} + \text{Orange} + \text{Orange} = 12$$

$$\text{Purple} + \text{Green} + \text{Blue} + \text{Blue} + \text{Green} = 25$$

$$\text{Orange} + \text{Purple} + \text{Purple} + \text{Orange} + \text{Orange} = 13$$

$$\text{Blue} + \text{Blue} + \text{Blue} = \text{Yellow}$$

SOLUTION



PUZZLE 30

$$\text{Blue} + \text{Purple} + \text{Green} = 16$$

$$\text{Blue} + \text{Purple} - \text{Green} = 4$$

$$\text{Blue} + \text{Green} + \text{Green} + \text{Blue} = 28$$

$$\text{Purple} + \text{Purple} + \text{Orange} = 11$$

$$\text{Orange} + \text{Orange} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 31

$$\text{Purple} + \text{Green} = 13$$

$$\text{Green} + \text{Green} + \text{Blue} + \text{Blue} = 18$$

$$\text{Purple} + \text{Purple} + \text{Green} + \text{Green} + \text{Green} = 31$$

$$\text{Blue} + \text{Brown} + \text{Brown} + \text{Brown} + \text{Brown} = 12$$

$$\text{Brown} \times \text{Green} = \text{Yellow}$$

SOLUTION



PUZZLE 32

$$\text{Green} + \text{Blue} + \text{Blue} = 12$$

$$\text{Blue} + \text{Purple} + \text{Green} + \text{Blue} = 17$$

$$\text{Blue} + \text{Green} + \text{Purple} + \text{Green} = 20$$

$$\text{Purple} + \text{Brown} + \text{Brown} + \text{Purple} = 12$$

$$(\text{Purple} + \text{Brown}) \times \text{Green} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 33

$$\text{Blue} + \text{Purple} = 14$$

$$\text{Blue} + \text{Purple} - \text{Green} = 8$$

$$\text{Green} + \text{Orange} + \text{Orange} + \text{Green} = 20$$

$$\text{Blue} + \text{Purple} + \text{Purple} + \text{Purple} = 16$$

$$(\text{Blue} + \text{Orange} + \text{Purple}) \div \text{Green} = \text{Yellow}$$

SOLUTION



PUZZLE 34

$$\text{Green} + \text{Green} + \text{Purple} = 5$$

$$\text{Blue} + \text{Purple} + \text{Green} + \text{Orange} = 16$$

$$\text{Green} + \text{Orange} + \text{Purple} - \text{Blue} = 2$$

$$\text{Purple} + \text{Green} + \text{Orange} + \text{Orange} + \text{Orange} = 19$$

$$\text{Blue} + \text{Blue} + \text{Purple} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 35

SOLUTION



$$\text{Green} + \text{Light Blue} + \text{Purple} = 13$$

$$\text{Red} + \text{Green} + \text{Light Blue} = 17$$

$$\text{Purple} + \text{Red} + \text{Purple} + \text{Red} = 24$$

$$\text{Green} + \text{Light Blue} + \text{Green} + \text{Light Blue} + \text{Green} = 20$$

$$\text{Light Blue} - \text{Purple} = \text{Yellow}$$

PUZZLE 36

SOLUTION



$$\text{Light Blue} + \text{Purple} + \text{Light Blue} = 15$$

$$\text{Green} + \text{Light Blue} = 14$$

$$\text{Green} + \text{Purple} + \text{Green} = 19$$

$$\text{Purple} + \text{Red} + \text{Red} + \text{Purple} = 10$$

$$\text{Red} + \text{Red} + \text{Red} = \text{Yellow}$$

Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 37

$$\text{Green} + \text{Purple} + \text{Blue} = 15$$

$$\text{Blue} + \text{Purple} + \text{Purple} + \text{Blue} = 24$$

$$\text{Green} + \text{Green} + \text{Green} + \text{Purple} = 16$$

$$\text{Red} + \text{Blue} + \text{Red} = 9$$

$$\text{Red} \times \text{Red} \times \text{Red} = \text{Yellow}$$

SOLUTION



PUZZLE 38

$$\text{Blue} + \text{Green} + \text{Green} + \text{Green} = 17$$

$$\text{Red} + \text{Red} + \text{Purple} + \text{Purple} = 30$$

$$\text{Purple} + \text{Red} + \text{Purple} + \text{Purple} = 29$$

$$\text{Purple} + \text{Red} + \text{Red} + \text{Purple} + \text{Blue} = 35$$

$$\text{Blue} + \text{Purple} + \text{Green} + \text{Red} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 39

$$\text{Blue} + \text{Orange} = 8$$

$$\text{Orange} + \text{Purple} + \text{Purple} + \text{Orange} = 18$$

$$\text{Green} + \text{Purple} + \text{Green} + \text{Green} + \text{Green} = 44$$

$$\text{Blue} + \text{Orange} + \text{Blue} + \text{Orange} + \text{Orange} = 17$$

$$\text{Green} + \text{Orange} = \text{Yellow}$$

SOLUTION



PUZZLE 40

$$\text{Orange} + \text{Purple} + \text{Purple} = 20$$

$$\text{Purple} - \text{Blue} + \text{Orange} = 10$$

$$\text{Purple} + \text{Blue} + \text{Orange} = 16$$

$$\text{Blue} + \text{Green} + \text{Green} + \text{Blue} = 22$$

$$\text{Green} + \text{Purple} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 41

$$\text{Red} + \text{Green} + \text{Blue} = 16$$

$$\text{Blue} + \text{Blue} + \text{Blue} + \text{Green} = 17$$

$$\text{Red} + \text{Red} + \text{Green} + \text{Blue} + \text{Blue} = 27$$

$$\text{Red} + \text{Red} = \text{Yellow}$$

SOLUTION



PUZZLE 42

$$\text{Blue} + \text{Purple} = 11$$

$$\text{Blue} + \text{Green} + \text{Purple} + \text{Purple} + \text{Purple} = 24$$

$$\text{Blue} + \text{Green} + \text{Green} + \text{Blue} + \text{Green} + \text{Blue} = 27$$

$$\text{Green} + \text{Green} + \text{Purple} = 11$$

$$\text{Purple} + \text{Green} + \text{Blue} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 43

$$\text{Purple} + \text{Blue} + \text{Green} = 20$$

$$\text{Purple} + \text{Purple} + \text{Blue} = 19$$

$$\text{Purple} + \text{Purple} + \text{Purple} + \text{Purple} + \text{Blue} + \text{Green} = 35$$

$$(\text{Purple} + \text{Purple}) \times \text{Purple} = \text{Orange}$$

SOLUTION



PUZZLE 44

$$\text{Blue} + \text{Purple} = 28$$

$$\text{Green} + \text{Blue} = 20$$

$$\text{Purple} + \text{Green} = 22$$

$$\text{Purple} + \text{Blue} + \text{Green} = \text{Orange}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 45

$$\text{Red} + \text{Blue} + \text{Red} = 4$$

$$\text{Green} + \text{Purple} + \text{Purple} + \text{Green} = 18$$

$$\text{Purple} + \text{Green} + \text{Blue} + \text{Purple} = 16$$

$$\text{Blue} + \text{Blue} + \text{Purple} + \text{Purple} + \text{Purple} = 19$$

$$\text{Red} + \text{Purple} + \text{Green} + \text{Blue} = \text{Yellow}$$

SOLUTION



PUZZLE 46

$$\text{Blue} + \text{Blue} + \text{Purple} = 13$$

$$\text{Purple} + \text{Purple} + \text{Green} + \text{Green} + \text{Blue} = 18$$

$$\text{Blue} + \text{Green} + \text{Purple} = 11$$

$$\text{Green} + \text{Purple} + \text{Purple} + \text{Purple} = 17$$

$$\text{Green} + \text{Green} + \text{Blue} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 47

$$\text{Blue} + \text{Purple} + \text{Green} = 18$$

$$\text{Green} + \text{Blue} - \text{Purple} = 4$$

$$\text{Green} + \text{Blue} + \text{Blue} = 14$$

$$\text{Green} + \text{Green} = \text{Orange}$$

SOLUTION



PUZZLE 48

$$\text{Blue} + \text{Blue} + \text{Blue} + \text{Purple} = 23$$

$$\text{Purple} + \text{Green} + \text{Blue} = 16$$

$$\text{Purple} + \text{Green} + \text{Blue} + \text{Green} + \text{Purple} = 27$$

$$\text{Green} + \text{Green} + \text{Purple} = 14$$

$$\text{Purple} - (\text{Blue} - \text{Green}) = \text{Orange}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 49

$$\text{Purple} + \text{Blue} + \text{Green} = 19$$

$$\text{Blue} - \text{Purple} + \text{Green} = 5$$

$$\text{Green} + \text{Green} + \text{Green} + \text{Blue} = 20$$

$$\text{Purple} + \text{Purple} + \text{Purple} = \text{Yellow}$$

SOLUTION



PUZZLE 50

$$\text{Blue} + \text{Blue} + \text{Purple} + \text{Purple} = 6$$

$$\text{Purple} + \text{Blue} + \text{Red} + \text{Red} + \text{Red} = 18$$

$$\text{Blue} + \text{Green} + \text{Green} + \text{Purple} + \text{Red} + \text{Blue} = 24$$

$$\text{Red} + \text{Purple} + \text{Green} + \text{Green} + \text{Purple} + \text{Blue} = 23$$

$$(\text{Green} + \text{Red}) \div \text{Blue} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 51

$$\text{Blue} + \text{Purple} + \text{Purple} = 16$$

$$\text{Green} - \text{Purple} = 4$$

$$\text{Blue} + \text{Green} - \text{Purple} = 10$$

$$\text{Green} + \text{Orange} + \text{Orange} + \text{Green} = 24$$

$$\left(\text{Orange} \div \text{Orange} \right) + \left(\text{Orange} \times \text{Blue} \right) = \text{Yellow}$$

SOLUTION



PUZZLE 52

$$\text{Green} + \text{Blue} + \text{Blue} = 15$$

$$\text{Blue} + \text{Green} + \text{Green} = 18$$

$$\text{Blue} + \text{Green} + \text{Green} + \text{Purple} + \text{Purple} = 20$$

$$\text{Purple} + \text{Purple} + \text{Purple} + \text{Orange} + \text{Orange} = 13$$

$$\text{Orange} + \text{Orange} - \text{Purple} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 53

$$\text{Blue} + \text{Purple} + \text{Green} = 15$$

$$\text{Blue} + \text{Orange} + \text{Purple} = 18$$

$$\text{Orange} + \text{Green} + \text{Green} + \text{Green} = 23$$

$$\text{Blue} + \text{Blue} + \text{Purple} = 17$$

$$\text{Purple} + \text{Purple} + \text{Purple} = \text{Yellow}$$

SOLUTION



PUZZLE 54

$$\text{Orange} + \text{Purple} + \text{Purple} = 12$$

$$\text{Purple} + \text{Blue} + \text{Blue} + \text{Purple} = 26$$

$$\text{Blue} + \text{Orange} + \text{Purple} + \text{Blue} = 23$$

$$\text{Green} + \text{Purple} + \text{Orange} + \text{Purple} + \text{Blue} = 24$$

$$\text{Green} + \text{Orange} - \text{Purple} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 55

$$\text{Purple} + \text{Purple} + \text{Blue} = 11$$

$$\text{Green} + \text{Green} + \text{Blue} = 17$$

$$\text{Green} + \text{Purple} = 11$$

$$\text{Green} + \text{Red} + \text{Red} + \text{Red} = 10$$

$$\text{Red} + \text{Red} = \text{Yellow}$$

SOLUTION



PUZZLE 56

$$\text{Purple} + \text{Blue} + \text{Green} = 14$$

$$\text{Blue} + \text{Green} + \text{Green} + \text{Green} = 19$$

$$\text{Purple} + \text{Purple} + \text{Blue} + \text{Green} + \text{Green} = 21$$

$$\text{Purple} \times \text{Purple} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 57

SOLUTION



$$\text{light blue} + \text{light red} + \text{light green} + \text{light purple} = 17$$

$$\text{light purple} + \text{light red} + \text{light red} + \text{light purple} + \text{light red} = 35$$

$$\text{light red} + \text{light green} + \text{light green} + \text{light purple} + \text{light blue} = 18$$

$$\text{light blue} + \text{light blue} + \text{light blue} + \text{light green} = 10$$

$$\text{light purple} + \text{light purple} = \text{light orange}$$

PUZZLE 58

SOLUTION



$$\text{light blue} + \text{light purple} + \text{light green} = 18$$

$$\text{light blue} + \text{light purple} + \text{light red} = 21$$

$$\text{light green} + \text{light green} + \text{light green} + \text{light red} = 19$$

$$\text{light blue} + \text{light purple} + \text{light purple} + \text{light purple} = 30$$

$$\text{light blue} + \text{light green} - \text{light purple} = \text{light orange}$$

Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 59

$$\text{Purple} + \text{Green} + \text{Red} + \text{Green} = 25$$

$$\text{Blue} + \text{Purple} + \text{Green} + \text{Blue} = 17$$

$$\text{Purple} + \text{Green} + \text{Green} + \text{Green} + \text{Purple} = 28$$

$$\text{Green} + \text{Purple} + \text{Purple} + \text{Red} + \text{Green} = 30$$

$$\text{Red} + \text{Blue} + \text{Red} = \text{Yellow}$$

SOLUTION



PUZZLE 60

$$\text{Red} + \text{Red} + \text{Red} + \text{Green} = 11$$

$$\text{Blue} + \text{Blue} + \text{Blue} + \text{Green} + \text{Red} = 18$$

$$\text{Green} + \text{Blue} + \text{Red} + \text{Green} + \text{Purple} + \text{Purple} + \text{Green} = 32$$

$$\text{Red} + \text{Green} + \text{Purple} + \text{Blue} + \text{Red} + \text{Green} = 23$$

$$\text{Purple} + \text{Purple} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 61

$$\text{Light Blue} + \text{Light Blue} + \text{Purple} = 16$$

$$\text{Orange} \times \text{Green} = 6$$

$$\text{Light Blue} + \text{Purple} + \text{Light Blue} + \text{Light Blue} = 22$$

$$\text{Orange} + \text{Light Blue} + \text{Purple} = 13$$

$$\text{Green} + \text{Green} + \text{Green} + \text{Green} = \text{Yellow}$$

SOLUTION



PUZZLE 62

$$\text{Purple} + \text{Light Blue} - \text{Orange} = 7$$

$$\text{Light Blue} + \text{Purple} - \text{Green} = 2$$

$$\text{Purple} + \text{Light Blue} + \text{Light Blue} + \text{Purple} = 16$$

$$\text{Purple} + \text{Orange} + \text{Green} + \text{Purple} = 13$$

$$\text{Light Blue} + \text{Light Blue} + \text{Light Blue} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 63

$$\text{Purple} + \text{Orange} + \text{Light Blue} = 15$$

$$\text{Purple} + \text{Light Blue} + \text{Light Blue} + \text{Light Blue} = 24$$

$$\text{Green} + \text{Orange} + \text{Orange} + \text{Orange} = 23$$

$$\text{Purple} + \text{Green} + \text{Light Blue} = 18$$

$$\text{Green} + \text{Purple} + \text{Orange} = \text{Yellow}$$

SOLUTION



PUZZLE 64

$$\text{Light Blue} + \text{Orange} + \text{Purple} = 13$$

$$\text{Purple} + \text{Light Blue} + \text{Green} = 11$$

$$\text{Orange} + \text{Green} + \text{Orange} + \text{Orange} + \text{Orange} = 18$$

$$\text{Light Blue} + \text{Purple} + \text{Light Blue} + \text{Light Blue} = 15$$

$$\text{Purple} + \text{Purple} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 65

$$\text{Purple} + \text{Orange} + \text{Green} = 13$$

$$\text{Green} + \text{Orange} + \text{Orange} + \text{Orange} = 22$$

$$\text{Blue} + \text{Orange} + \text{Green} + \text{Purple} = 19$$

$$\text{Blue} - \text{Purple} + \text{Green} + \text{Orange} = 9$$

$$\text{Green} + \text{Green} + \text{Green} = \text{Yellow}$$

SOLUTION



PUZZLE 66

$$\text{Green} + \text{Orange} + \text{Orange} = 19$$

$$\text{Green} + \text{Blue} + \text{Green} = 24$$

$$\text{Blue} + \text{Purple} + \text{Purple} = 14$$

$$\text{Green} - \text{Orange} + \text{Blue} = 10$$

$$\text{Purple} + \text{Purple} + \text{Purple} = \text{Yellow}$$

SOLUTION






Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.





PUZZLE 67

 +  +  = 10

SOLUTION






 +  +  +  +  = 28

 +  +  +  = 23

 +  +  +  = 22





 +  +  +  = 




PUZZLE 68





 +  +  = 16

SOLUTION



 +  +  +  = 21

 +  +  +  = 26

 +  +  +  = 20

 x  = 

Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 69

$$\text{Blue} + \text{Green} + \text{Red} + \text{Blue} = 23$$

$$\text{Purple} + \text{Blue} + \text{Green} + \text{Red} = 22$$

$$\text{Purple} + \text{Purple} + \text{Purple} + \text{Blue} = 21$$

$$\text{Red} + \text{Green} + \text{Green} + \text{Green} = 15$$

$$(\text{Red} + \text{Red}) \div \text{Blue} = \text{Yellow}$$

SOLUTION



PUZZLE 70

$$\text{Blue} + \text{Purple} + \text{Purple} = 17$$

$$\text{Blue} - \text{Purple} + \text{Green} = 10$$

$$\text{Blue} + \text{Green} + \text{Blue} = 22$$

$$\text{Green} + \text{Red} + \text{Red} = 14$$

$$\text{Red} + \text{Red} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 71

$$\text{Light Blue} + \text{Purple} - \text{Green} = 6$$

$$\text{Light Blue} + \text{Purple} - \text{Orange} = 10$$

$$\text{Light Blue} + \text{Light Blue} + \text{Purple} + \text{Purple} = 30$$

$$\text{Green} + \text{Orange} + \text{Light Blue} + \text{Light Blue} = 28$$

$$\text{Purple} \times \text{Purple} = \text{Yellow}$$

SOLUTION



PUZZLE 72

$$\text{Light Blue} + \text{Light Blue} + \text{Purple} = 25$$

$$\text{Green} + \text{Orange} + \text{Orange} + \text{Purple} = 20$$

$$\text{Green} + \text{Green} + \text{Orange} + \text{Orange} = 18$$

$$(\text{Light Blue} + \text{Green}) - (\text{Purple} + \text{Orange}) = 4$$

$$\text{Green} + \text{Orange} + \text{Light Blue} + \text{Purple} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 73

$$\text{Blue} + \text{Green} + \text{Blue} = 8$$

$$\text{Purple} + \text{Blue} + \text{Green} + \text{Red} = 16$$

$$\text{Purple} + \text{Purple} + \text{Green} + \text{Blue} = 19$$

$$\text{Red} + \text{Red} + \text{Green} + \text{Green} = 12$$

$$\text{Green} + \text{Green} + \text{Red} + \text{Purple} + \text{Red} + \text{Blue} + \text{Blue} = 25$$

$$\text{Blue} + \text{Blue} + \text{Blue} = \text{Yellow}$$

SOLUTION



PUZZLE 74

$$\text{Green} + \text{Green} + \text{Red} = 18$$

$$\text{Red} + \text{Green} + \text{Blue} + \text{Purple} = 18$$

$$\text{Blue} + \text{Red} + \text{Red} + \text{Red} + \text{Blue} = 16$$

$$\text{Purple} + \text{Blue} + \text{Red} + \text{Purple} = 13$$

$$\text{Red} + \text{Blue} + \text{Blue} + \text{Green} + \text{Red} = 22$$

$$\text{Purple} + \text{Green} + \text{Green} - \text{Blue} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 75

SOLUTION



$$\text{Red} + \text{Green} + \text{Blue} = 18$$

$$\text{Green} + \text{Blue} + \text{Blue} + \text{Blue} = 26$$

$$\text{Purple} + \text{Green} + \text{Red} + \text{Blue} = 20$$

$$\text{Blue} + \text{Purple} + \text{Green} - \text{Red} = 8$$

$$\text{Purple} \times \text{Purple} = \text{Yellow}$$

PUZZLE 76

SOLUTION



$$\text{Purple} + \text{Blue} + \text{Blue} + \text{Purple} = 24$$

$$\text{Blue} + \text{Blue} + \text{Purple} + \text{Blue} = 20$$

$$\text{Purple} + \text{Green} + \text{Red} + \text{Purple} = 25$$

$$\text{Green} + \text{Red} + \text{Red} + \text{Red} = 23$$

$$\text{Green} + \text{Green} + \text{Green} = \text{Yellow}$$

Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 77

$$\text{Purple} + \text{Green} + \text{Purple} = 21$$

$$\text{Orange} + \text{Orange} + \text{Green} + \text{Blue} = 17$$

$$\text{Orange} + \text{Green} + \text{Blue} + \text{Blue} + \text{Blue} = 26$$

$$\text{Blue} + \text{Orange} + \text{Blue} + \text{Blue} + \text{Blue} = 27$$

$$\text{Orange} + \text{Purple} + \text{Purple} = \text{Yellow}$$

SOLUTION



PUZZLE 78

$$\text{Purple} + \text{Blue} + \text{Green} = 11$$

$$\text{Orange} + \text{Orange} + \text{Green} + \text{Green} = 16$$

$$\text{Blue} + \text{Blue} + \text{Green} + \text{Blue} = 14$$

$$\text{Orange} + \text{Green} + \text{Purple} + \text{Purple} = 18$$

$$\text{Orange} + \text{Purple} + \text{Blue} + \text{Green} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 79

SOLUTION

$$\text{Blue} + \text{Purple} + \text{Green} + \text{Green} = 17$$

$$\text{Green} + \text{Green} + \text{Blue} + \text{Blue} + \text{Purple} = 23$$

$$\text{Green} + \text{Green} + \text{Green} + \text{Blue} + \text{Blue} = 24$$

$$\text{Blue} + \text{Green} + \text{Red} + \text{Red} = 26$$

$$(\text{Green} + \text{Red}) \div \text{Blue} = \text{Yellow}$$



PUZZLE 80

SOLUTION

$$\text{Blue} + \text{Blue} - \text{Green} = 10$$

$$\text{Blue} + \text{Blue} - \text{Purple} = 8$$

$$\text{Green} + \text{Purple} + \text{Purple} = 16$$

$$\text{Blue} + \text{Red} + \text{Red} + \text{Red} + \text{Blue} = 23$$

$$\text{Red} \times \text{Red} = \text{Yellow}$$



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 81

$$\text{Purple} + \text{Blue} + \text{Purple} + \text{Blue} = 22$$

$$\text{Orange} + \text{Purple} + \text{Orange} + \text{Blue} + \text{Orange} = 32$$

$$\text{Purple} + \text{Purple} + \text{Green} + \text{Orange} + \text{Blue} + \text{Green} = 28$$

$$\text{Blue} + \text{Blue} + \text{Orange} + \text{Green} + \text{Purple} + \text{Green} = 27$$

$$\text{Green} \times \text{Green} \times \text{Green} = \text{Orange}$$

SOLUTION



PUZZLE 82

$$\text{Orange} + \text{Purple} + \text{Purple} = 17$$

$$\text{Blue} + \text{Green} + \text{Green} + \text{Blue} = 12$$

$$\text{Purple} + \text{Orange} + \text{Blue} + \text{Orange} = 17$$

$$\text{Purple} + \text{Orange} + \text{Blue} + \text{Purple} = 21$$

$$\text{Green} + \text{Green} + \text{Green} = \text{Orange}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 83

$$\text{Blue} + \text{Purple} + \text{Orange} = 16$$

$$\text{Green} + \text{Orange} + \text{Purple} = 13$$

$$\text{Blue} + \text{Green} + \text{Purple} = 14$$

$$\text{Green} + \text{Orange} + \text{Purple} + \text{Blue} = 20$$

$$\text{Orange} + \text{Green} = \text{Yellow}$$

SOLUTION



PUZZLE 84

$$\text{Green} + \text{Blue} + \text{Blue} = 21$$

$$\text{Green} - \text{Blue} + \text{Purple} = 10$$

$$\text{Green} + \text{Purple} + \text{Green} = 25$$

$$\text{Orange} + \text{Blue} + \text{Orange} = 12$$

$$\text{Purple} + \text{Orange} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 85

$$\text{Green} + \text{Blue} + \text{Purple} + \text{Red} = 17$$

$$\text{Blue} + \text{Purple} + \text{Purple} + \text{Blue} + \text{Purple} = 19$$

$$\text{Green} + \text{Green} + \text{Red} + \text{Purple} + \text{Blue} = 19$$

$$\text{Purple} + \text{Blue} + \text{Purple} + \text{Green} + \text{Red} + \text{Blue} = 25$$

$$\text{Blue} + \text{Blue} = \text{Yellow}$$

SOLUTION



PUZZLE 86

$$\text{Blue} + \text{Blue} + \text{Blue} + \text{Purple} = 18$$

$$\text{Purple} + \text{Purple} + \text{Purple} + \text{Blue} = 14$$

$$\text{Blue} + \text{Purple} + \text{Green} + \text{Red} = 16$$

$$\text{Green} + \text{Red} + \text{Red} + \text{Green} + \text{Green} = 23$$

$$\text{Red} + \text{Red} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 87

SOLUTION



$$\text{Light Blue} + \text{Red} + \text{Red} = 12$$

$$\text{Purple} + \text{Light Blue} + \text{Light Green} + \text{Red} + \text{Red} = 22$$

$$\text{Red} + \text{Light Blue} + \text{Purple} + \text{Light Green} = 20$$

$$\text{Light Green} + \text{Purple} + \text{Purple} + \text{Purple} = 24$$

$$\text{Light Blue} - \text{Red} = \text{Light Orange}$$

PUZZLE 88

SOLUTION



$$\text{Purple} + \text{Light Blue} + \text{Light Green} + \text{Light Green} = 25$$

$$\text{Red} + \text{Red} + \text{Purple} + \text{Purple} = 12$$

$$\text{Purple} + \text{Light Blue} + \text{Light Green} + \text{Red} = 19$$

$$\text{Light Green} + \text{Light Blue} + \text{Light Blue} + \text{Light Blue} = 23$$

$$\text{Light Blue} \times \text{Red} = \text{Light Orange}$$

Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 89

$$\text{Light Blue} + \text{Light Blue} + \text{Purple} + \text{Purple} = 20$$

$$\text{Green} + \text{Green} + \text{Light Blue} + \text{Purple} + \text{Green} = 31$$

$$\text{Green} + \text{Red} + \text{Light Blue} + \text{Purple} + \text{Green} + \text{Light Blue} = 29$$

$$\text{Red} + \text{Green} + \text{Light Blue} + \text{Purple} + \text{Purple} + \text{Green} = 37$$

$$\text{Red} + \text{Red} = \text{Yellow}$$

SOLUTION



PUZZLE 90

$$\text{Light Blue} + \text{Purple} + \text{Red} + \text{Green} = 16$$

$$\text{Purple} + \text{Red} + \text{Green} + \text{Green} = 12$$

$$\text{Green} + \text{Light Blue} + \text{Green} + \text{Green} = 16$$

$$\text{Red} + \text{Light Blue} + \text{Green} + \text{Purple} + \text{Red} = 18$$

$$\text{Purple} + \text{Purple} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 91

SOLUTION



$$\text{Blue} \times \text{Purple} \div \text{Green} = 4$$

$$\text{Green} \times \text{Blue} \div \text{Purple} = 16$$

$$\text{Green} \div \text{Purple} = 2$$

$$\text{Blue} + \text{Purple} + \text{Purple} = 14$$

$$\text{Green} + \text{Red} + \text{Red} + \text{Green} = 20$$

$$\text{Blue} \div \text{Red} = \text{Yellow}$$

PUZZLE 92

SOLUTION



$$\text{Green} + \text{Blue} + \text{Purple} = 16$$

$$\text{Red} + \text{Red} + \text{Red} + \text{Green} = 30$$

$$\text{Blue} + \text{Purple} - \text{Green} = 10$$

$$\text{Blue} + \text{Purple} + \text{Blue} + \text{Green} = 24$$

$$\text{Purple} + \text{Purple} = \text{Yellow}$$

Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 93

$$\text{Purple} + \text{Green} + \text{Red} = 8$$

$$\text{Blue} + \text{Purple} + \text{Green} + \text{Red} + \text{Red} + \text{Purple} = 21$$

$$\text{Purple} + \text{Red} + \text{Blue} + \text{Purple} + \text{Purple} = 23$$

$$\text{Red} + \text{Purple} + \text{Green} + \text{Green} = 10$$

$$\text{Blue} + \text{Green} = \text{Yellow}$$

SOLUTION



PUZZLE 94

$$\text{Red} - \text{Green} = 6$$

$$\text{Red} + \text{Blue} + \text{Red} + \text{Green} = 23$$

$$\text{Purple} + \text{Purple} + \text{Purple} + \text{Blue} = 14$$

$$\text{Blue} + \text{Purple} + \text{Purple} + \text{Blue} = 16$$

$$\text{Green} \times \text{Purple} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 95

$$\text{Purple} + \text{Blue} + \text{Green} + \text{Red} = 16$$

$$\text{Purple} + \text{Blue} + \text{Purple} + \text{Purple} + \text{Blue} = 28$$

$$\text{Purple} + \text{Purple} + \text{Red} + \text{Green} + \text{Blue} + \text{Red} + \text{Blue} = 31$$

$$\text{Green} + \text{Red} + \text{Green} + \text{Red} = 8$$

$$\text{Blue} - \text{Purple} + \text{Red} = \text{Yellow}$$

SOLUTION



PUZZLE 96

$$\text{Green} + \text{Green} + \text{Red} = 17$$

$$\text{Purple} + \text{Blue} + \text{Green} + \text{Red} = 18$$

$$\text{Purple} + \text{Blue} + \text{Green} - \text{Red} = 8$$

$$\text{Purple} + \text{Blue} + \text{Blue} + \text{Blue} + \text{Purple} = 18$$

$$\text{Purple} \times \text{Purple} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 97

$$\text{Green} + \text{Blue} + \text{Blue} = 20$$

$$\text{Blue} + \text{Purple} + \text{Purple} + \text{Green} + \text{Red} + \text{Red} = 28$$

$$\text{Red} + \text{Green} + \text{Purple} + \text{Blue} = 21$$

$$\text{Red} + \text{Red} + \text{Purple} + \text{Red} = 13$$

$$\text{Purple} + \text{Purple} + \text{Purple} = \text{Yellow}$$

SOLUTION



PUZZLE 98

$$\text{Blue} + \text{Green} = 10$$

$$\text{Blue} - \text{Green} = 4$$

$$\text{Blue} + \text{Purple} + \text{Red} + \text{Blue} = 27$$

$$\text{Purple} + \text{Purple} + \text{Red} + \text{Purple} = 29$$

$$\text{Red} + \text{Red} = \text{Yellow}$$

SOLUTION



Solve the puzzles below by determining what number belongs in each colored circle. Each color in a puzzle represents a unique, positive number. When you have solved each equation, write the number for each color in the solutions box and check your answers at the back of the book.

PUZZLE 99

$$\text{Blue} + \text{Purple} + \text{Purple} + \text{Blue} = 20$$

$$\text{Blue} + \text{Orange} + \text{Purple} + \text{Green} = 20$$

$$\text{Blue} + \text{Purple} + \text{Green} + \text{Blue} + \text{Green} + \text{Orange} + \text{Purple} = 34$$

$$\text{Blue} + \text{Orange} + \text{Orange} + \text{Blue} + \text{Purple} = 29$$

$$(\text{Blue} + \text{Purple}) \div (\text{Orange} + \text{Green}) = \text{Orange}$$

SOLUTION



PUZZLE 100

$$\text{Blue} + \text{Purple} + \text{Green} + \text{Blue} = 15$$

$$\text{Green} + \text{Purple} + \text{Blue} - \text{Orange} = 1$$

$$\text{Green} + \text{Green} + \text{Blue} + \text{Purple} + \text{Green} = 12$$

$$\text{Purple} + \text{Orange} + \text{Blue} + \text{Blue} = 23$$

$$\text{Purple} + \text{Purple} = \text{Orange}$$

SOLUTION



SOLUTIONS

1. (1) (4) (3) (6) (2)

2. (3) (4) (15) (1) (7)

3. (7) (4) (16) (5)

4. (5) (2) (10) (1) (3)

5. (4) (3) (13) (6)

6. (4) (2) (17) (5) (6)

7. (2) (5) (30) (3)

8. (7) (9) (10) (4) (5)

9. (3) (7) (8) (4) (2)

10. (11) (8) (33) (14)

11. (9) (6) (19) (4)

12. (5) (1) (13) (3) (4)

13. (2) (6) (15) (5) (3)

14. (1) (5) (18) (9)

15. (9) (3) (11) (2)

16. (5) (2) (13) (9) (1)

17. (8) (3) (9) (5) (2)

18. (7) (4) (17) (6) (5)

19. (7) (5) (13) (3) (4)

20. (3) (8) (15) (7) (4)

21. (8) (2) (14) (5) (1)

22. (4) (7) (10) (3) (5)

23. (4) (7) (8) (3) (2)

24. (4) (2) (10) (1) (5)

25. (3) (1) (2) (6)

26. (1) (4) (14) (5) (8)

27. (3) (7) (13) (6) (2)

28. (8) (4) (16) (5) (3)

29. (4) (6) (12) (5) (1)

30. (8) (6) (14) (2) (7)

31. (4) (5) (10) (8) (2)

32. (3) (6) (36) (5) (1)

33. (13) (6) (3) (1) (4)
34. (7) (1) (17) (3) (5)
35. (7) (2) (3) (4) (8)
36. (6) (8) (6) (3) (2)
37. (5) (3) (8) (7) (2)
38. (5) (4) (24) (7) (8)
39. (7) (9) (10) (8) (1)
40. (3) (8) (15) (7) (6)
41. (4) (5) (14) (7)
42. (6) (3) (14) (5)
43. (9) (6) (50) (5)
44. (13) (7) (35) (15)
45. (2) (4) (12) (5) (1)
46. (4) (2) (8) (5)
47. (3) (8) (16) (7)
48. (5) (3) (6) (8)
49. (8) (4) (21) (7)

50. (2) (7) (6) (1) (5)
51. (6) (9) (19) (5) (3)
52. (4) (7) (9) (1) (5)
53. (7) (5) (9) (3) (8)
54. (8) (4) (1) (5) (2)
55. (3) (7) (2) (4) (1)
56. (7) (4) (9) (3)
57. (3) (1) (8) (4) (9)
58. (6) (4) (2) (8) (7)
59. (3) (6) (19) (5) (8)
60. (3) (8) (4) (2) (1)
61. (6) (2) (8) (4) (3)
62. (5) (6) (15) (3) (1)
63. (7) (8) (16) (3) (5)
64. (3) (2) (12) (6) (4)
65. (6) (1) (3) (5) (7)
66. (6) (9) (12) (4) (5)

67. (7) (8) (20) (1) (4)
68. (4) (6) (9) (7) (3)
69. (6) (2) (3) (5) (9)
70. (7) (8) (6) (5) (3)
71. (7) (9) (64) (8) (5)
72. (8) (7) (26) (9) (2)
73. (3) (2) (9) (7) (4)
74. (5) (8) (14) (3) (2)
75. (7) (5) (4) (2) (6)
76. (4) (2) (6) (8) (7)
77. (6) (5) (19) (8) (3)
78. (4) (2) (17) (5) (6)
79. (6) (4) (2) (3) (8)
80. (7) (4) (9) (6) (3)
81. (5) (2) (8) (6) (7)
82. (4) (2) (6) (7) (3)
83. (7) (4) (10) (3) (6)

84. (6) (9) (10) (7) (3)
85. (5) (2) (10) (3) (7)
86. (5) (7) (2) (3) (1)
87. (8) (3) (6) (7) (2)
88. (5) (8) (10) (4) (2)
89. (1) (7) (8) (9) (4)
90. (7) (3) (8) (4) (2)
91. (8) (6) (2) (3) (4)
92. (8) (3) (10) (5) (9)
93. (7) (2) (9) (5) (1)
94. (5) (2) (6) (3) (8)
95. (8) (1) (7) (4) (3)
96. (4) (6) (9) (3) (5)
97. (6) (8) (12) (4) (3)
98. (7) (3) (10) (8) (5)
99. (7) (4) (1) (3) (6)
100. (5) (1) (8) (4) (9)