

Math Conundrums

Warm Up with Garfield



Created by
JIM DAVIS

Written by
Marjorie Frank

Incentive Publications, Inc.
Nashville, TN

To Parents and Teachers



- Use each math conundrum as a short warm-up to stimulate math reasoning and build excitement about what math can do, OR as the basis for a longer math lesson focused on the related skills.
- Use all conundrums randomly, or choose a conundrum that specifically fits a skill or standard.
- Use the book to complement any existing math program.
- Let students work alone or in pairs on the conundrums, OR use them with the whole group.
- Garfield's math conundrums can be used as take-home challenge problems. Give the student a few days to ponder the conundrum and bring a solution to share and compare.
- Help students identify the strategy used for each conundrum. Notice that different strategies may be applied to the same problem. Compare problem-solving approaches. Ask students to explain how they arrived at their solutions.
- Help students connect the concepts and processes to their real lives. Ask them to think of places and times they have used or might use the same problem-solving strategy.
- Connect students to more Garfield cartoons so that they can create their own math conundrums inspired by his antics.

Notes:

- The skills covered are applicable to a general math course, a pre-algebra course, or an algebra course.
- On page 93, find a list of the math skills and thinking skills covered by the math conundrums. This will help to identify the conundrums that strengthen a specific skill or standard you are teaching.

Illustrations by Paws, Inc.
Additional Artwork by Kathleen Bullock
Cover by Kathleen Bullock and Kris Sexton
Edited by Jill Norris

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What do you get when you mix the antics of a cynical (but lovable) cat with dozens of clever (but challenging) math problems? You get unique ventures that put your math skills to good use—plus a whole lot of adventuresome, mind-stretching fun!



GARFIELD

is an unusual (and creative) cat who gets into all sorts of dilemmas.

To handle them, he uses a host of problem-solving strategies. He surprises readers and fans with his quick and flexible use of many reasoning skills, as well as his wit and wisdom. He applies endless ingenuity to new or repeated challenges. Garfield has an uncanny ability to arrive at the most unconventional (but sensible) solutions to everyday problems.

&

MATH CONUNDRUMS

are questions or situations that surprise, puzzle, stretch, and delight you. To solve these tricky math problems, you must use your sharpest reasoning skills mixed with all the problem-solving strategies you have learned. Like Garfield, you need to think outside ordinary boundaries, keep trying different approaches, and be willing to take leaps into new territory—until you solve even the most perplexing problems.

Because Garfield is a natural-born problem solver, it's a great idea to mix his antics with math. The result of this combination is a collection of 88 delightful, brain-busting MATH CONUNDRUMS that flow from the adventures of Garfield.

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Catnap Conundrum

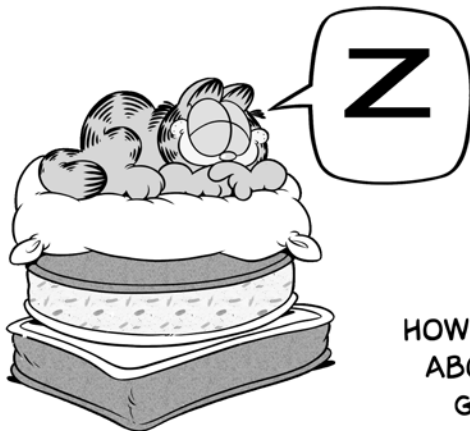
Garfield—that cynical (but lovable) cat, has had an astonishingly full life. Most people know him as a popular comic strip character, but off the newspaper page he has been on every imaginable adventure. He has even led parades, starred in movies and TV specials, recorded a CD, and published a cookbook. You can buy a DVD to watch Garfield's antics or a cell phone that sports his picture.

Although Garfield can amaze his fans with wild escapades, he is the first to admit that one of his favorite activities is napping. So sharpen your pencils and your brain cells to solve this catnap conundrum.

On June 19, 2008, Garfield celebrated thirty years as a cartoon character.

Assume that from his "birth" to that anniversary, these statistics are true:

- He has spent an average of four hours each day (24-hour period) eating.
- He has spent two and one-half times that long each day pursuing adventures that interest him (awake).
- He has napped the rest of the time.



HOW MUCH TIME (UP TO THE DATE ABOVE) HAS GARFIELD NAPPED?
GIVE YOUR ANSWER IN HOURS.

NAME _____

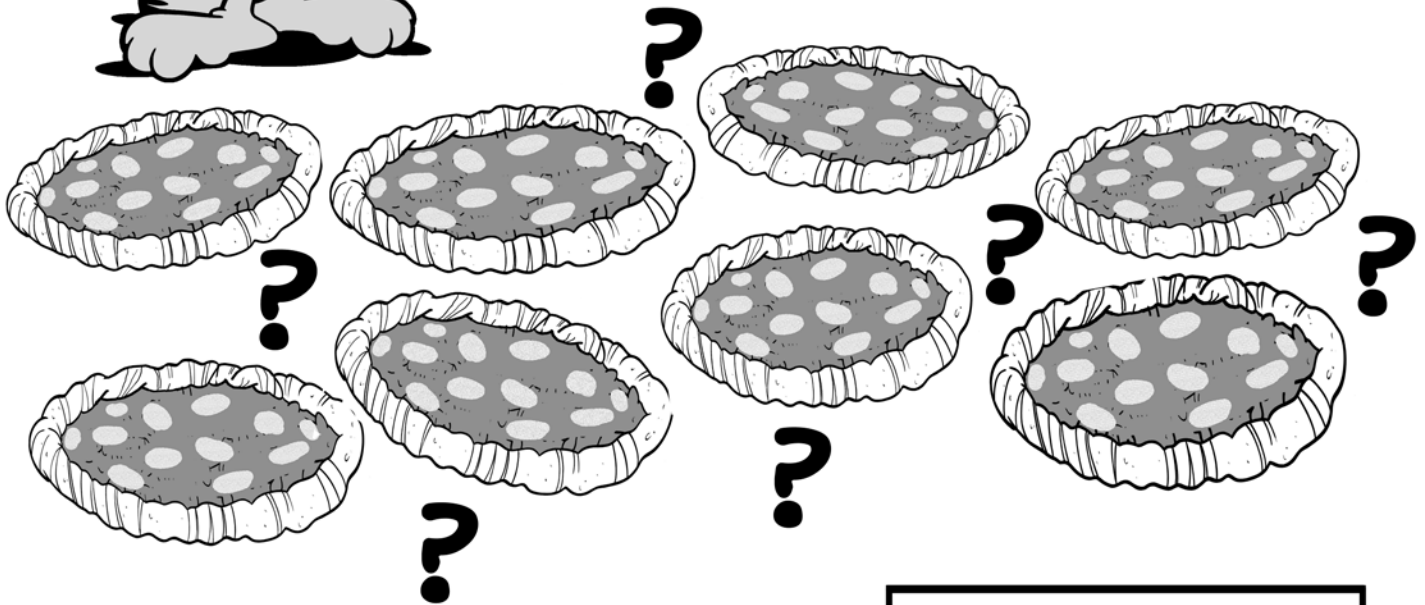
The Pizza Mix-Up



Because eating is one of Garfield's favorite pasttimes, it is to his utter delight that he must solve a mystery requiring him to taste pizza.

Garfield ordered eight pizzas for a party. Three of the pizzas were topped with cheese and sausage. The remaining five each had a different meat (plus cheese). Unfortunately, every box label fell off upon delivery, and the meat on all the pizzas looked the same.

Alas! The mystery of which pizza was which could be solved only by tasting.



WHAT IS THE MINIMUM
NUMBER OF TRIAL TASTES
GARFIELD MUST TAKE
BEFORE HE CAN IDENTIFY
EACH PIZZA?

NAME _____