

MATH MAVENS' MYSTERIES

Name: _____

Date: _____

The Cajun Chili Caper

Howdy, Math Detectives! It's that time of year again — the annual Cajun Chili Cook-Off is underway! Every year, chefs from all over the country travel to tiny Cookeville for this famous chili competition.

This year, I decided to experience the Cook-Off and sample some of the mouth-watering entries for myself! I was especially excited to see Chef Bon Appetit, the Grand Master Champion of chili cooks. Bon Appetit is famous for his prize-winning, super hot, mouth-flaming Cajun Chili.

As the chefs lined up by their stoves preparing their recipes, I noticed a young, raven-haired woman eyeing Chef Bon Appetit. I nudged one of the judges, and asked who the woman was.

"Why, that's Indie Jestion," answered the judge. "She's the local Cookeville Chili Champion, but she's never won the competition."

Just then, I noticed the woman approach Chef Bon Appetit's stove and peek into his chili pot. With a slight nudge of her elbow, Indie knocked over an empty metal bowl from the table. CLANG!

"OOPS! Oh, I'm so sorry!" cried Indie. Then, as Chef Bon Appetit bent over to pick up the bowl, I saw Indie quickly produce a jar of red pepper flakes and pour 3 teaspoons into the chili pot.

"Well, that's all taken care of!" said Chef Appetit briskly, as he stood up and returned to his work at the stove. "Now it's time to give the chili a little taste, yes?"

"Enjoy!" said Indie, with a sneaky glimmer in her eye.

Chef Appetit stirred the bubbling chili with his wooden spoon. He lifted a spoon full of chili to his lips and took a small taste. Suddenly his eyes



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swelled to twice their size, tears ran down his cheeks, and his throat began to smoke! The chef liked his chili hot, but this was ridiculous!

“My goodness!” cried the crowd as they saw the Chef turn into a human inferno. I quickly grabbed a pitcher of water and soaked the chef with it.

“OOOOO—EEEEEE!!” cried Appetit. “I guarantee, this chili is done ruined with too much pepper! How could this have happened?”

“I know!” I said, pointing to the chili offender, who was trying to sneak away. “It was Indie Jestion who spiked the chili on the stove with the extra red pepper flakes! I saw her put three extra teaspoons into your chili.”

The culprit was caught with the jar of red pepper flakes in her apron. When questioned, Indie replied: “Big deal! This year, I’m not going to let some hot shot chef beat me out of the championship!”

“Oh, no! What will I do now?” moaned the beleaguered chef. It’s 3:00pm, and the chili must be ready by 5:00pm! I don’t have time to make a new batch of chili from scratch.”

“No, but you can fix the one you already have,” I suggested. “If you add more of the other ingredients in the same proportions, they can balance out the effect of the red pepper. And if you hurry, you’ll be ready for the judging by 5:00pm!”

“But how much of the other ingredients should I add?” cried the confused Chef. “I can’t change the ratio of ingredients in my secret recipe!”



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Solve the Mystery!

OK, super sleuths! It's time to come to the rescue. Here is the original list of ingredients in Chef Bon Appetit's prize winning chili:

- 1 lb. of canned tomatoes, cut up
- $\frac{3}{4}$ lb. of ground beef
- $\frac{2}{3}$ cups of chopped onions
- 1 $\frac{1}{2}$ teaspoons of red pepper flakes

Remember, Indie Jestion added 3 extra teaspoons of red pepper flakes to the chili on the stove. How much of the other ingredients should Chef Appetit ADD to his chili?

Circle the correct answer:

- A. 3 lb. of canned tomatoes, 2 $\frac{1}{4}$ lb. of ground beef, 2 cups of chopped onions
- B. 2 lb. of canned tomatoes, 1 $\frac{1}{4}$ lb. of ground beef, 1 $\frac{1}{3}$ cups of chopped onions
- C. 2 lb. of canned tomatoes, 1 $\frac{1}{2}$ lb. of ground beef, 1 $\frac{1}{3}$ cups of chopped onions
- D. 2 lb. of canned tomatoes, 1 $\frac{3}{4}$ lb. of ground beef, 1 $\frac{2}{3}$ cups of chopped onions

Use this space to show your work: