



The Great Crustville Crust Caper

Grade 5 math · Multiplication, Rounding, Fractions of a number, Order of operations, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

The legendary Golden Dough Recipe has been stolen from the academy safe! A shadowy figure was seen slipping through the pantry at midnight, leaving a trail of marinara sauce. We must find the Sauce Saboteur and save the upcoming Crustville Pizza Festival!

1. Solve each math problem. The answer is a number, and the letter beside it is what that number stands for.
2. In the clue boxes, write that letter in every box showing the same number, then read the secret clue.
3. Use each clue to cross suspects off the list. The one suspect left at the end is the culprit!

My answer: the Sauce Saboteur is _____

Possible suspects

Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	SIGNATURE PIZZA SKILL	SPECIAL PIZZA GEAR	PIZZA TOSSING STYLE	EVIDENCE AT THE SCENE	KNOWN PIZZA WEAKNESS
Bella Basil	Dough Stretching	Golden Peel	Left-Handed	Flour Dusty	Pineapple Pizza
Gina Yeast	Sauce Swirling	Golden Peel	Left-Handed	Burnt Brown	Garlic Breath
Donna Dough	Sauce Swirling	Spice Shaker	Right-Handed	Flour Dusty	Sucker for Soda
Olive Oilson	Sauce Swirling	Spice Shaker	Left-Handed	Burnt Brown	Pineapple Pizza
Gordon Garlic	Cheese Shredding	Cheese Melter	Left-Handed	Basil Green	Garlic Breath
Fiona Focaccia	Sauce Swirling	Spice Shaker	Left-Handed	Basil Green	Garlic Breath
Crusty Carl	Brick Ovens	Golden Peel	Right-Handed	Flour Dusty	Garlic Breath
Penny Parmigiano	Cheese Shredding	Spice Shaker	Left-Handed	Burnt Brown	Pineapple Pizza
Bruno Brickoven	Spice Blending	Spice Shaker	Right-Handed	Burnt Brown	Pineapple Pizza
Sal Sourdough	Brick Ovens	Delivery Bike	Left-Handed	Burnt Brown	Pineapple Pizza
Tony Tomato	Spice Blending	Cheese Melter	Left-Handed	Burnt Brown	Pineapple Pizza
Chef Alfredo	Brick Ovens	Delivery Bike	Right-Handed	Burnt Brown	Sucker for Soda
Cal Zone	Brick Ovens	Dough Roller	Left-Handed	Basil Green	Pineapple Pizza
Olivia Mozzarella	Spice Blending	Spice Shaker	Left-Handed	Burnt Brown	Garlic Breath
Sammy Slice	Cheese Shredding	Spice Shaker	Right-Handed	Flour Dusty	Sucker for Soda
Luigi Pepperoni	Dough Stretching	Dough Roller	Left-Handed	Burnt Brown	Garlic Breath
Anchovy Andy	Brick Ovens	Cheese Melter	Left-Handed	Flour Dusty	Pineapple Pizza
Chef Mario	Sauce Swirling	Golden Peel	Left-Handed	Burnt Brown	Sucker for Soda
Pepper Roni	Cheese Shredding	Dough Roller	Right-Handed	Flour Dusty	Sucker for Soda
Marco Marinara	Spice Blending	Spice Shaker	Left-Handed	Burnt Brown	Pineapple Pizza
Pete Pizza	Cheese Shredding	Dough Roller	Left-Handed	Basil Green	Pineapple Pizza

CLUE 1
Multiplication facts (1-12)

Our young detectives found the suspect's storage room filled with stacks of dough boxes. By counting the boxes in six neat rows of nine, we can unlock the safe that holds the first clue.

Solve each problem, then write its letter in every clue box that shows the same number.

T			T											T					
48	11	50	48	11	15	50	21	70	3	50	77	24	3	48	5	15	70	50	
36	70	50	132	15	12	50	5	14	120	15	30	50							

$4 \times 12 = \square \rightarrow \text{T}$	$7 \times 2 = \square \rightarrow \text{Y}$	$7 \times 11 = \square \rightarrow \text{S}$	
$5 \times 10 = \square \rightarrow \text{E}$	$3 \times 10 = \square \rightarrow \text{K}$	$4 \times 6 = \square \rightarrow \text{N}$	
$1 \times 3 = \square \rightarrow \text{O}$	$12 \times 11 = \square \rightarrow \text{L}$	$7 \times 10 = \square \rightarrow \text{D}$	
$1 \times 11 = \square \rightarrow \text{H}$	$6 \times 6 = \square \rightarrow \text{A}$	$5 \times 3 = \square \rightarrow \text{I}$	$7 \times 3 = \square \rightarrow \text{F}$
$12 \times 10 = \square \rightarrow \text{B}$	$1 \times 5 = \square \rightarrow \text{R}$	$12 \times 1 = \square \rightarrow \text{V}$	

Scratch space:

CLUE 2 Rounding

An electric scale in the pantry got damaged during the heist and now rounds every weight to the nearest ten ounces. We need to estimate the weight of the spilled cheese to crack the keypad code.

Solve each problem, then write its letter in every clue box that shows the same number.

L												L			
370	7000	90	2300	3700	230	700	4300	7000	4300	90	370	430	70	1100	
														L	L
5000	900	70	4300	2900	7000	5000	430	700	2300	3700	7000	9000	230	370	370

Round 374 to the nearest ten → **L**

Round 928 to the nearest hundred → **M**

Round 9,099 to the nearest thousand → **W**

Round 71 to the nearest ten → **U**

Round 93 to the nearest ten → **F**

Round 7,317 to the nearest thousand → **E**

Round 2,262 to the nearest hundred → **T**

Round 3,678 to the nearest hundred → **H**

Round 230 to the nearest ten → **A**

Round 4,583 to the nearest thousand → **S**

Round 1,079 to the nearest hundred → **R**

Round 2,927 to the nearest hundred → **G**

Round 4,303 to the nearest hundred → **D**

Round 426 to the nearest ten → **O**

Round 737 to the nearest hundred → **N**

Scratch space:

CLUE 3
Fractions of a number

The thief got hungry and ate a fraction of a giant pizza left on the prep table. Calculating exactly how many slices are missing from the original twenty-four will give us the next lead.

Solve each problem, then write its letter in every clue box that shows the same number.

T			T								T						T
30	26	25	30	26	13	25	31	26	35	30	25	18	18	17	25	25	30
									T								
3	13	4	25	35	3	3	22	25	30	28	3	3	13	4	36		

$3/5 \text{ of } 50 = \square \rightarrow \boxed{\text{T}}$

$1/8 \text{ of } 104 = \square \rightarrow \boxed{\text{I}}$

$1/8 \text{ of } 24 = \square \rightarrow \boxed{\text{P}}$

$1/5 \text{ of } 85 = \square \rightarrow \boxed{\text{W}}$

$1/8 \text{ of } 32 = \square \rightarrow \boxed{\text{N}}$

$2/10 \text{ of } 140 = \square \rightarrow \boxed{\text{O}}$

$1/4 \text{ of } 140 = \square \rightarrow \boxed{\text{A}}$

$1/5 \text{ of } 90 = \square \rightarrow \boxed{\text{S}}$

$1/6 \text{ of } 150 = \square \rightarrow \boxed{\text{E}}$

$2/8 \text{ of } 124 = \square \rightarrow \boxed{\text{F}}$

$3/10 \text{ of } 120 = \square \rightarrow \boxed{\text{G}}$

$3/6 \text{ of } 52 = \square \rightarrow \boxed{\text{H}}$

$4/10 \text{ of } 55 = \square \rightarrow \boxed{\text{L}}$

Scratch space:

CLUE 4 Order of operations

The chef's secret recipe book has a coded math equation for the correct order of mixing flour, yeast, and water. Solved in the correct order, it reveals the password to the suspect's computer.

Solve each problem, then write its letter in every clue box that shows the same number.

S																			
77	22	11	51	49	59	59	48	75	37	76	75	80	33	11	34	48	22	75	

S						S										
77	24	75	48	11	59	77	75	49	23	48	22	11	49	59		

$12 \times 7 - 7 = \square \rightarrow$ S	$9 + 7 \times 4 = \square \rightarrow$ K	$56 + 4 \times 6 = \square \rightarrow$ O
$1 + 8 \times 4 = \square \rightarrow$ W	$9 \times 3 - 3 = \square \rightarrow$ T	$18 + 2 \times 2 = \square \rightarrow$ I
$7 \times 8 - 8 = \square \rightarrow$ A	$3 \times 7 - 10 = \square \rightarrow$ N	$7 \times 11 - 1 = \square \rightarrow$ B
$8 \times 9 - 13 = \square \rightarrow$ D	$7 \times 11 - 26 = \square \rightarrow$ G	$3 \times 9 - 4 = \square \rightarrow$ M
$61 + 2 \times 7 = \square \rightarrow$ R	$13 + 6 \times 6 = \square \rightarrow$ E	$30 + 2 \times 2 = \square \rightarrow$ H

Scratch space:

CLUE 5**Division facts (1-12) - the last clue**

We found a box of stolen garlic knots dropped on the floor. Splitting the total number of knots equally among the four junior detective teams reveals the final clue about the suspect.

First solve each problem. Then find each answer in the numbered list below and cross that sentence out. One sentence will be left - that is exactly what the villain did!

Step 1 - solve these:

$88 \div 8 = \boxed{}$

$56 \div 8 = \boxed{}$

$36 \div 4 = \boxed{}$

$15 \div 5 = \boxed{}$

$10 \div 2 = \boxed{}$

$4 \div 1 = \boxed{}$

$20 \div 2 = \boxed{}$

$36 \div 6 = \boxed{}$

$144 \div 12 = \boxed{}$

$20 \div 10 = \boxed{}$

$56 \div 7 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain measures the legendary herb blend, then blasts the lock with a garlic butter gun.
2. The villain shreds a giant block of mozzarella, then rolls the dough flat with a heavy machine.
3. The villain swirls the secret marinara sauce, then grabs the golden peel to scoop the prize.
4. The villain stretches the magical dough, then speeds away on a fast delivery bike.
5. The villain swirls the secret marinara sauce, then speeds away on a fast delivery bike.
6. The villain measures the legendary herb blend, then speeds away on a fast delivery bike.
7. The villain measures the legendary herb blend, then shakes spicy oregano over the crime scene.
8. The villain fires up the ancient brick oven, then blasts the lock with a garlic butter gun.
9. The villain swirls the secret marinara sauce, then shakes spicy oregano over the crime scene.
10. The villain measures the legendary herb blend, then rolls the dough flat with a heavy machine.
11. The villain shreds a giant block of mozzarella, then shakes spicy oregano over the crime scene.
12. The villain fires up the ancient brick oven, then speeds away on a fast delivery bike.

Answer Key

The Great Crustville Crust Caper

Culprit: Tony Tomato

Spice Blending · Cheese Melter · Left-Handed · Burnt Brown · Pineapple Pizza

Trail: Start 21 → Clue 1 19 → Clue 2 14 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE THIEF DOES NOT RIDE A DELIVERY BIKE"

$4 \times 12 = 48$ (T) · $7 \times 2 = 14$ (Y) · $7 \times 11 = 77$ (S) · $5 \times 10 = 50$ (E) · $3 \times 10 = 30$ (K) · $4 \times 6 = 24$ (N) · $1 \times 3 = 3$ (O) · $12 \times 11 = 132$ (L) · $7 \times 10 = 70$ (D) · $1 \times 11 = 11$ (H) · $6 \times 6 = 36$ (A) · $5 \times 3 = 15$ (I) · $7 \times 3 = 21$ (F) · $12 \times 10 = 120$ (B) · $1 \times 5 = 5$ (R) · $12 \times 1 = 12$ (V)

Clue 2 (Rounding): "LEFT HANDED FLOUR SMUDGES ON THE WALL"

Round 374 to the nearest ten = 370 (L) · Round 928 to the nearest hundred = 900 (M) · Round 9,099 to the nearest thousand = 9000 (W) · Round 71 to the nearest ten = 70 (U) · Round 93 to the nearest ten = 90 (F) · Round 7,317 to the nearest thousand = 7000 (E) · Round 2,262 to the nearest hundred = 2300 (T) · Round 3,678 to the nearest hundred = 3700 (H) · Round 230 to the nearest ten = 230 (A) · Round 4,583 to the nearest thousand = 5000 (S) · Round 1,079 to the nearest hundred = 1100 (R) · Round 2,927 to the nearest hundred = 2900 (G) · Round 4,303 to the nearest hundred = 4300 (D) · Round 426 to the nearest ten = 430 (O) · Round 737 to the nearest hundred = 700 (N)

Clue 3 (Fractions of a number): "THE THIEF HATES SWEET PINEAPPLE TOPPING"

$\frac{3}{5}$ of 50 = 30 (T) · $\frac{1}{8}$ of 104 = 13 (I) · $\frac{1}{8}$ of 24 = 3 (P) · $\frac{1}{5}$ of 85 = 17 (W) · $\frac{1}{8}$ of 32 = 4 (N) · $\frac{2}{10}$ of 140 = 28 (O) · $\frac{1}{4}$ of 140 = 35 (A) · $\frac{1}{5}$ of 90 = 18 (S) · $\frac{1}{6}$ of 150 = 25 (E) · $\frac{2}{8}$ of 124 = 31 (F) · $\frac{3}{10}$ of 120 = 36 (G) · $\frac{3}{6}$ of 52 = 26 (H) · $\frac{4}{10}$ of 55 = 22 (L)

Clue 4 (Order of operations): "SINGED DARK BROWN HAIR STRANDS REMAINED"

$12 \times 7 - 7 = 77$ (S) · $9 + 7 \times 4 = 37$ (K) · $56 \div 4 \times 6 = 80$ (O) · $1 + 8 \times 4 = 33$ (W) · $9 \times 3 - 3 = 24$ (T) · $18 \div 2 \times 2 = 22$ (I) · $7 \times 8 - 8 = 48$ (A) · $3 \times 7 - 10 = 11$ (N) · $7 \times 11 - 1 = 76$ (B) · $8 \times 9 - 13 = 59$ (D) · $7 \times 11 - 26 = 51$ (G) · $3 \times 9 - 4 = 23$ (M) · $61 \div 2 \times 7 = 75$ (R) · $13 + 6 \times 6 = 49$ (E) · $30 \div 2 \times 2 = 34$ (H)

Clue 5 (Division facts (1-12)): surviving statement is box 1 → Tony Tomato

$88 \div 8 = 11$ · $56 \div 8 = 7$ · $36 \div 4 = 9$ · $15 \div 5 = 3$ · $10 \div 2 = 5$ · $4 \div 1 = 4$ · $20 \div 2 = 10$ · $36 \div 6 = 6$ · $144 \div 12 = 12$ · $20 \div 10 = 2$ · $56 \div 7 = 8$