The Great Tuna Tart Caper

Grade 6 math · Percentages, Exponents, Order of operations, Multiplication, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

Someone snuck into the Whisker Haven Bakery and snatched the legendary Golden Tuna Tart! Detective Whiskers needs your math skills to narrow down the suspects and catch the sneaky thief before the grand feast.

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 Cat Burglar is _____

Possible suspects

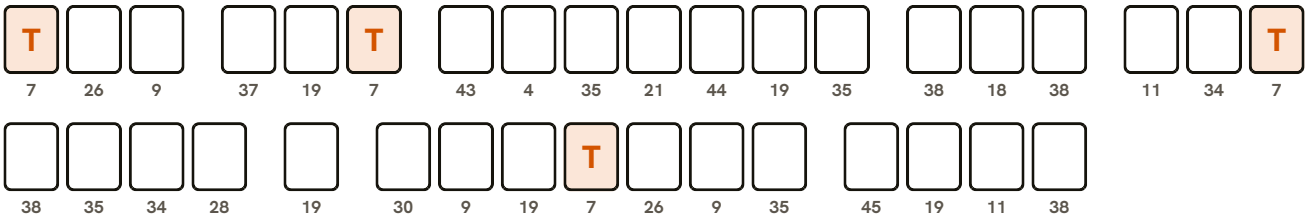
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	STEALTH SKILL	DROPPED ITEM	PAW PRINT	FUR PATTERN	DISTRACTION
Cleo Whiskers	Wall Climb	Fish Biscuit	LEFT PAW PRINT	TABBY STRIPES	BELL BALL
Bella Scratch	Fast Dash	Tuna Treat	RIGHT PAW PRINT	CALICO PATCHES	LASER POINTER
Marley Fuzzy	Wall Climb	Fish Biscuit	RIGHT PAW PRINT	CALICO PATCHES	LASER POINTER
Mittens McSnout	Wall Climb	Fish Biscuit	RIGHT PAW PRINT	TABBY STRIPES	LASER POINTER
Milo Clawson	High Leap	Fish Biscuit	RIGHT PAW PRINT	CALICO PATCHES	BELL BALL
Buster Biscuit	Wall Climb	Feather Wand	LEFT PAW PRINT	TUXEDO MARKS	BELL BALL
Oliver Purr	Wall Climb	Catnip Pouch	RIGHT PAW PRINT	CALICO PATCHES	CATNIP TOY
Willow Meow	High Leap	Tuna Treat	RIGHT PAW PRINT	CALICO PATCHES	LASER POINTER
Barnaby Paws	Night Vision	Catnip Pouch	RIGHT PAW PRINT	TABBY STRIPES	LASER POINTER
Luna Shadow	Silent Paws	Tuna Treat	LEFT PAW PRINT	TABBY STRIPES	BELL BALL
Pumpernickel Paw	Wall Climb	Catnip Pouch	LEFT PAW PRINT	CALICO PATCHES	LASER POINTER
Chester Fluffernutter	Wall Climb	Milk Saucer	LEFT PAW PRINT	TUXEDO MARKS	CATNIP TOY
Hazel Furry	Night Vision	Fish Biscuit	LEFT PAW PRINT	TUXEDO MARKS	LASER POINTER
Bandit Whisk	Silent Paws	Milk Saucer	LEFT PAW PRINT	TABBY STRIPES	LASER POINTER
Smokey Caper	High Leap	Catnip Pouch	RIGHT PAW PRINT	CALICO PATCHES	LASER POINTER
Ziggy Pounce	Wall Climb	Feather Wand	LEFT PAW PRINT	CALICO PATCHES	LASER POINTER
Felix Fluff	Silent Paws	Feather Wand	RIGHT PAW PRINT	CALICO PATCHES	LASER POINTER
Ginger Slink	Wall Climb	Milk Saucer	RIGHT PAW PRINT	CALICO PATCHES	BELL BALL
Simba Tailor	Wall Climb	Fish Biscuit	LEFT PAW PRINT	TUXEDO MARKS	BELL BALL
Oreo Stripe	Wall Climb	Feather Wand	RIGHT PAW PRINT	TUXEDO MARKS	BELL BALL
Jasper Boots	High Leap	Catnip Pouch	RIGHT PAW PRINT	TABBY STRIPES	LASER POINTER

CLUE 1 Percentages

> Detective Whiskers checked what percentage of the bakery flour sacks had paw prints on them to reveal the first clue.

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



25% of 28 = ☐ → T

20% of 215 = ☐ → B

25% of 176 = ☐ → L

60% of 15 = ☐ → E

10% of 190 = ☐ → A

20% of 140 = ☐ → P

50% of 52 = ☐ → H

25% of 44 = ☐ → N

20% of 175 = ☐ → R

40% of 75 = ☐ → F

5% of 740 = ☐ → C

50% of 76 = ☐ → D

10% of 340 = ☐ → O

25% of 84 = ☐ → G

50% of 90 = ☐ → W

5% of 360 = ☐ → I

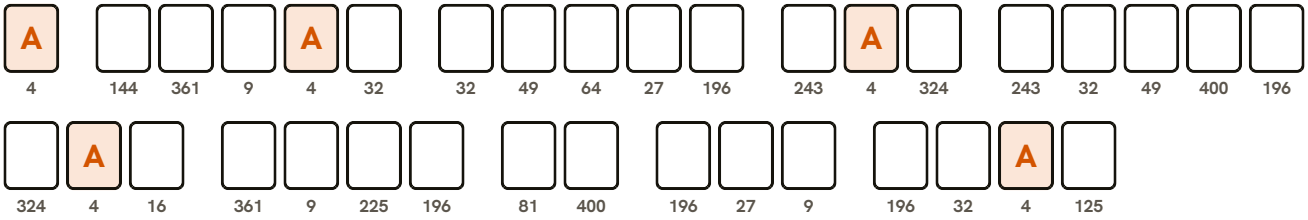
40% of 10 = ☐ → U

Scratch space:

CLUE 2 Exponents

To unlock the bakery security grid the detective calculated exponential power jumps on the paw scanner.

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



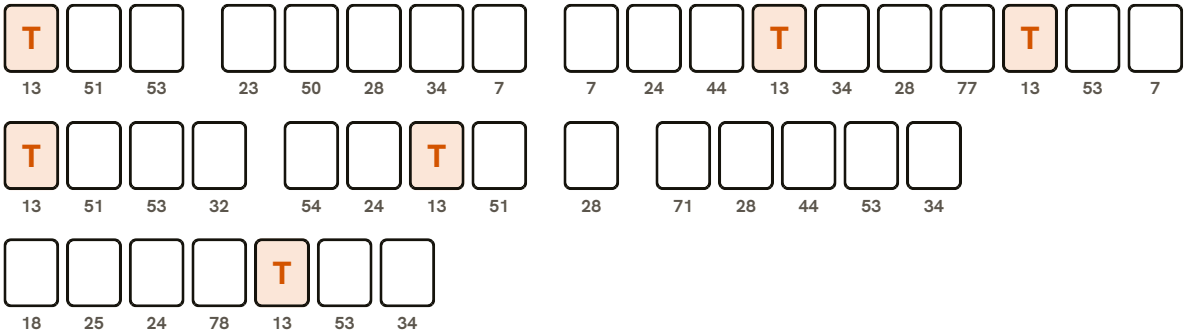
2^2 = ☐ → A	5^3 = ☐ → Y	15^2 = ☐ → F	4^2 = ☐ → S
3^5 = ☐ → P	4^3 = ☐ → G	3^4 = ☐ → O	18^2 = ☐ → W
3^3 = ☐ → H	2^5 = ☐ → R	12^2 = ☐ → C	14^2 = ☐ → T
19^2 = ☐ → L	3^2 = ☐ → E	7^2 = ☐ → I	20^2 = ☐ → N

Scratch space:

CLUE 3 Order of operations

A coded vault door required following the exact order of operations to solve the button sequence.

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



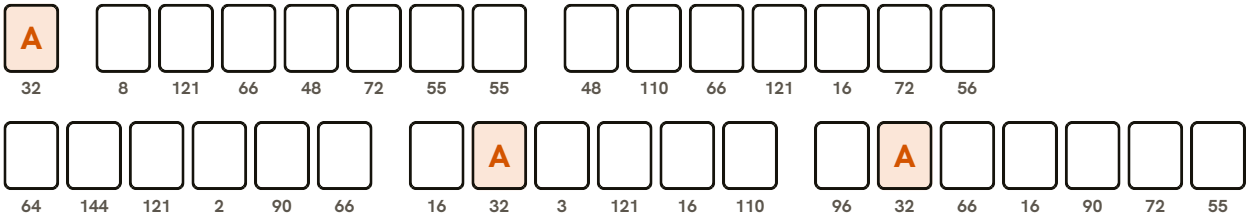
10 × 2 - 7 = ☐ → T	69 + 4 × 2 = ☐ → C	4 × 9 - 18 = ☐ → P
22 + 4 × 3 = ☐ → R	43 + 7 × 5 = ☐ → N	10 × 6 - 6 = ☐ → W
9 × 10 - 19 = ☐ → L	8 × 3 - 1 = ☐ → G	26 + 3 × 8 = ☐ → U
8 + 4 × 9 = ☐ → S	4 × 9 - 11 = ☐ → O	39 + 7 × 2 = ☐ → E
3 × 11 - 1 = ☐ → M	7 × 4 - 4 = ☐ → I	14 + 2 × 7 = ☐ → A
9 × 6 - 3 = ☐ → H	2 × 6 - 5 = ☐ → D	

Scratch space:

CLUE 4 Multiplication facts (1-12)

> By counting rows of cat treats lined up on five pantry shelves the team found a hidden message.

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



8 × 4 = ☐ → A	8 × 8 = ☐ → B	7 × 8 = ☐ → D
12 × 12 = ☐ → R	4 × 12 = ☐ → N	3 × 1 = ☐ → L
2 × 1 = ☐ → G	10 × 9 = ☐ → H	12 × 8 = ☐ → P
4 × 4 = ☐ → C	11 × 10 = ☐ → O	11 × 11 = ☐ → I
6 × 12 = ☐ → E	2 × 4 = ☐ → W	6 × 11 = ☐ → T
11 × 5 = ☐ → S		

Scratch space:

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

> Sharing the rescued fish biscuits evenly into supply boxes uncovered the final piece of evidence.

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:

45 ÷ 5 = ☐ | 30 ÷ 10 = ☐ | 84 ÷ 12 = ☐ | 11 ÷ 1 = ☐ | 55 ÷ 11 = ☐

10 ÷ 1 = ☐ | 32 ÷ 8 = ☐ | 5 ÷ 5 = ☐ | 72 ÷ 6 = ☐ | 18 ÷ 3 = ☐

24 ÷ 12 = ☐

Step 2 - cross out the sentence with each answer:

1. The villain used night vision in the dark kitchen, then knocked over a milk saucer.
2. The villain used wall climb to reach the shelf, then knocked over a milk saucer.
3. The villain used a fast dash across the floor, then dropped a tuna treat.
4. The villain used a fast dash across the floor, then knocked over a milk saucer.
5. The villain used silent paws to slip inside, then left a catnip pouch behind.
6. The villain used silent paws to slip inside, then knocked over a milk saucer.
7. The villain made a high leap over the counter, then dropped a tuna treat.
8. The villain made a high leap over the counter, then left a catnip pouch behind.
9. The villain used wall climb to reach the shelf, then spilled a fish biscuit.
10. The villain used a fast dash across the floor, then left a catnip pouch behind.
11. The villain used a fast dash across the floor, then lost a feather wand.
12. The villain used night vision in the dark kitchen, then spilled a fish biscuit.

TEACHER / PARENT

Answer Key

The Great Tuna Tart Caper

Culprit: Smokey Caper

High Leap · Catnip Pouch · RIGHT PAW PRINT · CALICO PATCHES · LASER POINTER

Trail: Start 21 → Clue 1 17 → Clue 2 10 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Percentages): "THE CAT BURGLAR DID NOT DROP A FEATHER WAND"

25% of 28 = 7 (T) · 20% of 215 = 43 (B) · 25% of 176 = 44 (L) · 60% of 15 = 9 (E) · 10% of 190 = 19 (A) · 20% of 140 = 28 (P) · 50% of 52 = 26 (H) · 25% of 44 = 11 (N) · 20% of 175 = 35 (R) · 40% of 75 = 30 (F) · 5% of 740 = 37 (C) · 50% of 76 = 38 (D) · 10% of 340 = 34 (O) · 25% of 84 = 21 (G) · 50% of 90 = 45 (W) · 5% of 360 = 18 (I) · 40% of 10 = 4 (U)

Clue 2 (Exponents): "A CLEAR RIGHT PAW PRINT WAS LEFT ON THE TRAY"

2^2 = 4 (A) · 5^3 = 125 (Y) · 15^2 = 225 (F) · 4^2 = 16 (S) · 3^5 = 243 (P) · 4^3 = 64 (G) · 3^4 = 81 (O) · 18^2 = 324 (W) · 3^3 = 27 (H) · 2^5 = 32 (R) · 12^2 = 144 (C) · 14^2 = 196 (T) · 19^2 = 361 (L) · 3^2 = 9 (E) · 7^2 = 49 (I) · 20^2 = 400 (N)

Clue 3 (Order of operations): "THE GUARD DISTRACTED THEM WITH A LASER POINTER"

10 × 2 - 7 = 13 (T) · 69 + 4 × 2 = 77 (C) · 4 × 9 - 18 = 18 (P) · 22 + 4 × 3 = 34 (R) · 43 + 7 × 5 = 78 (N) · 10 × 6 - 6 = 54 (W) · 9 × 10 - 19 = 71 (L) · 8 × 3 - 1 = 23 (G) · 26 + 3 × 8 = 50 (U) · 8 + 4 × 9 = 44 (S) · 4 × 9 - 11 = 25 (O) · 39 + 7 × 2 = 53 (E) · 3 × 11 - 1 = 32 (M) · 7 × 4 - 4 = 24 (I) · 14 + 2 × 7 = 28 (A) · 9 × 6 - 3 = 51 (H) · 2 × 6 - 5 = 7 (D)

Clue 4 (Multiplication facts (1-12)): "A WITNESS NOTICED BRIGHT CALICO PATCHES"

8 × 4 = 32 (A) · 8 × 8 = 64 (B) · 7 × 8 = 56 (D) · 12 × 12 = 144 (R) · 4 × 12 = 48 (N) · 3 × 1 = 3 (L) · 2 × 1 = 2 (G) · 10 × 9 = 90 (H) · 12 × 8 = 96 (P) · 4 × 4 = 16 (C) · 11 × 10 = 110 (O) · 11 × 11 = 121 (I) · 6 × 12 = 72 (E) · 2 × 4 = 8 (W) · 6 × 11 = 66 (T) · 11 × 5 = 55 (S)

Clue 5 (Division facts (1-12)): surviving statement is box 8 → Smokey Caper

45 ÷ 5 = 9 · 30 ÷ 10 = 3 · 84 ÷ 12 = 7 · 11 ÷ 1 = 11 · 55 ÷ 11 = 5 · 10 ÷ 1 = 10 · 32 ÷ 8 = 4 · 5 ÷ 5 = 1 · 72 ÷ 6 = 12 · 18 ÷ 3 = 6 · 24 ÷ 12 = 2