The Case of the Missing First Edition

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

Detective: _____ **Date:** _____

Someone snuck into the Rare Books Vault of the Whispering Stacks Library and stole the priceless Golden Codex! Decode the library logs and track down the culprit.

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 Book Thief is _____

Possible suspects

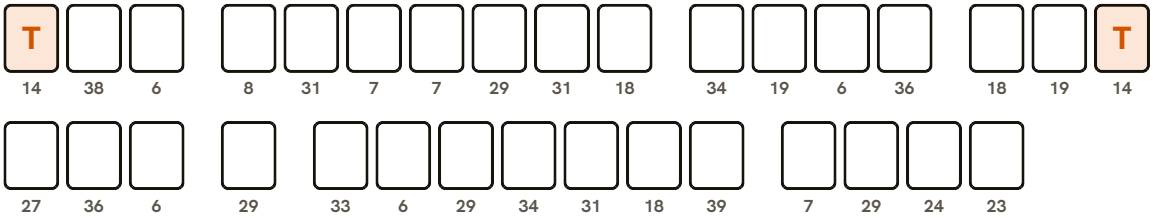
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	SPECIAL ABILITY	LIBRARY GEAR	DOMINANT HAND	HAIR COLOR	THIEVERY WEAKNESS
Ivy Manuscript	Page Freeze	Reading Lamp	Right Handed	Ink Black Hair	Sneeze Powder
Mason Paper	Bookmark Blast	Magnifying Monocle	Right Handed	Ink Black Hair	Sneeze Powder
Maya Quill	Page Freeze	Magnifying Monocle	Right Handed	Ink Black Hair	Bright Flashlight
Mia Ink	Bookmark Blast	Reading Lamp	Right Handed	Paper White Hair	Sneeze Powder
Noah Text	Whisper Magic	Leather Satchel	Right Handed	Spine Red Hair	Sneeze Powder
Leo Page	Book Shield	Reading Lamp	Left Handed	Spine Red Hair	Loud Alarm
Eli Author	Page Freeze	Magnifying Monocle	Right Handed	Ink Black Hair	Sneeze Powder
Nora Binding	Page Freeze	Reading Lamp	Left Handed	Ink Black Hair	Bright Flashlight
Jack Cover	Bookmark Blast	Leather Satchel	Left Handed	Ink Black Hair	Bright Flashlight
Ezra Shelf	Bookmark Blast	Magnifying Monocle	Right Handed	Ink Black Hair	Loud Alarm
Chloe Index	Page Freeze	Glowing Quill	Left Handed	Ink Black Hair	Sneeze Powder
Clara Book	Page Freeze	Silver Stamp	Right Handed	Paper White Hair	Sneeze Powder
Caleb Journal	Page Freeze	Silver Stamp	Right Handed	Paper White Hair	Bright Flashlight
Grace Margin	Bookmark Blast	Magnifying Monocle	Left Handed	Spine Red Hair	Loud Alarm
Sarah Spine	Book Shield	Leather Satchel	Left Handed	Paper White Hair	Sneeze Powder
Liam Atlas	Whisper Magic	Leather Satchel	Right Handed	Ink Black Hair	Sneeze Powder
Ruby Reader	Ink Spray	Silver Stamp	Right Handed	Paper White Hair	Bright Flashlight
Sam Vellum	Ink Spray	Reading Lamp	Left Handed	Paper White Hair	Loud Alarm
Hugo Story	Page Freeze	Glowing Quill	Left Handed	Spine Red Hair	Bright Flashlight
Owen Folio	Page Freeze	Leather Satchel	Right Handed	Ink Black Hair	Sneeze Powder
Fiona Novel	Page Freeze	Magnifying Monocle	Left Handed	Ink Black Hair	Loud Alarm

CLUE 1 Fractions of a number

> The Head Librarian found a partial catalog list showing only a fraction of the missing ledger entries.

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



1/2 of 28 = ☐ → T

2/4 of 46 = ☐ → P

2/4 of 16 = ☐ → V

3/10 of 90 = ☐ → U

4/8 of 62 = ☐ → I

2/4 of 58 = ☐ → A

3/6 of 78 = ☐ → G

7/10 of 10 = ☐ → L

5/10 of 76 = ☐ → H

1/3 of 18 = ☐ → E

1/5 of 180 = ☐ → S

3/8 of 48 = ☐ → N

2/3 of 51 = ☐ → D

1/2 of 66 = ☐ → R

2/8 of 96 = ☐ → M

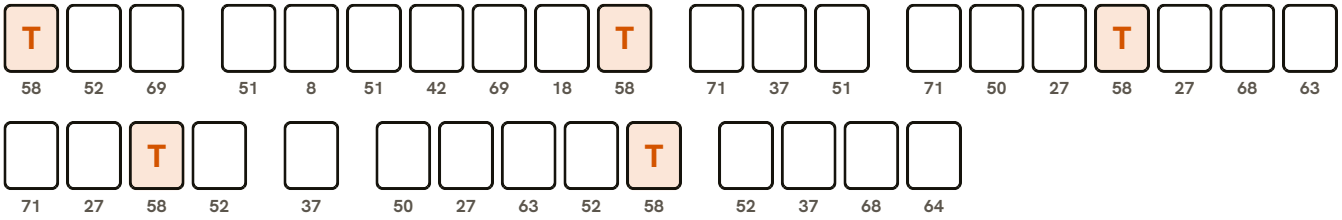
2/4 of 38 = ☐ → O

Scratch space:

CLUE 2 Order of operations

To decrypt the cipher on the checkout desk terminal, solve this multi-step equation in the proper order.

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



34 + 4 × 6 = ☐ → T

10 × 7 - 7 = ☐ → G

3 + 3 × 5 = ☐ → C

6 × 6 - 28 = ☐ → U

5 × 12 - 10 = ☐ → R

9 × 10 - 19 = ☐ → W

8 × 10 - 29 = ☐ → S

9 × 6 - 2 = ☐ → H

10 × 9 - 22 = ☐ → N

13 + 7 × 2 = ☐ → I

37 + 9 × 3 = ☐ → D

18 + 6 × 4 = ☐ → P

7 + 5 × 6 = ☐ → A

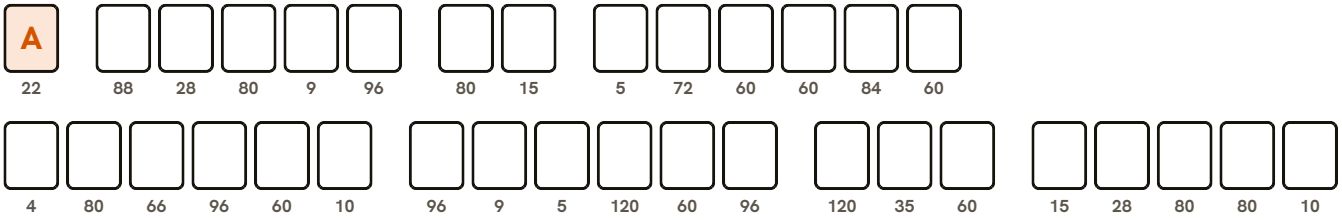
12 × 8 - 27 = ☐ → E

Scratch space:

CLUE 3 Multiplication facts (1-12)

> The thief organized rows of book crates in identical stacks near the back exit.

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



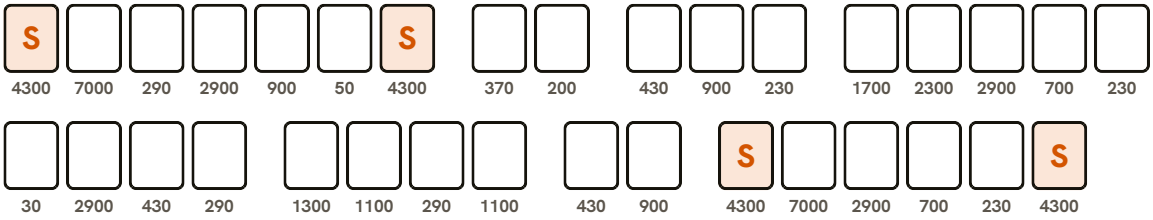
2 × 11 = ☐ → A	8 × 12 = ☐ → D	7 × 12 = ☐ → Z
7 × 4 = ☐ → L	11 × 8 = ☐ → C	1 × 10 = ☐ → R
5 × 7 = ☐ → H	5 × 1 = ☐ → S	10 × 6 = ☐ → E
2 × 2 = ☐ → P		
3 × 3 = ☐ → U	12 × 6 = ☐ → N	11 × 6 = ☐ → W
12 × 10 = ☐ → T	3 × 5 = ☐ → F	10 × 8 = ☐ → O

Scratch space:

CLUE 4 Rounding

The digital security scanner on the library door only displays rounded page counts.

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



Round 4,325 to the nearest hundred ☐ → **S**

Round 29 to the nearest ten ☐ → **H**

Round 249 to the nearest hundred ☐ → **F**

Round 680 to the nearest hundred ☐ → **C**

Round 6,911 to the nearest thousand ☐ → **T**

Round 52 to the nearest ten ☐ → **D**

Round 432 to the nearest ten ☐ → **I**

Round 2,321 to the nearest hundred ☐ → **L**

Round 2,920 to the nearest hundred ☐ → **A**

Round 1,094 to the nearest hundred ☐ → **E**

Round 233 to the nearest ten ☐ → **K**

Round 897 to the nearest hundred ☐ → **N**

Round 373 to the nearest ten ☐ → **O**

Round 289 to the nearest ten ☐ → **R**

Round 1,253 to the nearest hundred ☐ → **W**

Round 1,693 to the nearest hundred ☐ → **B**

Scratch space:

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

> The Archive Patrol is splitting up the remaining library aisles equally to search for clues.

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:

70 ÷ 10 = ☐	84 ÷ 7 = ☐	36 ÷ 4 = ☐	56 ÷ 7 = ☐	3 ÷ 3 = ☐
30 ÷ 5 = ☐	5 ÷ 1 = ☐	3 ÷ 1 = ☐	66 ÷ 6 = ☐	24 ÷ 6 = ☐
20 ÷ 2 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain whispered magic into the stacks, then inspected the vault with a monocle.
2. The villain sprayed ink across the aisle, then inspected the vault with a monocle.
3. The villain froze the book pages solid, then lit up the hall with a reading lamp.
4. The villain blasted bookmark cards everywhere, then inspected the vault with a monocle.
5. The villain whispered magic into the stacks, then escaped with a glowing quill.
6. The villain blasted bookmark cards everywhere, then marked the shelf with a silver stamp.
7. The villain froze the book pages solid, then stashed the loot in a leather satchel.
8. The villain blocked the door with a book shield, then escaped with a glowing quill.
9. The villain whispered magic into the stacks, then stashed the loot in a leather satchel.
10. The villain sprayed ink across the aisle, then stashed the loot in a leather satchel.
11. The villain blocked the door with a book shield, then lit up the hall with a reading lamp.
12. The villain froze the book pages solid, then inspected the vault with a monocle.

TEACHER / PARENT

Answer Key

The Case of the Missing First Edition

Culprit: Mason Paper

Bookmark Blast · Magnifying Monocle · Right Handed · Ink Black Hair · Sneeze Powder

Trail: Start 21 → Clue 1 16 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Fractions of a number): "THE VILLAIN DOES NOT USE A READING LAMP"

1/2 of 28 = 14 (T) · 2/4 of 46 = 23 (P) · 2/4 of 16 = 8 (V) · 3/10 of 90 = 27 (U) · 4/8 of 62 = 31 (I) · 2/4 of 58 = 29 (A) · 3/6 of 78 = 39 (G) · 7/10 of 10 = 7 (L) · 5/10 of 76 = 38 (H) · 1/3 of 18 = 6 (E) · 1/5 of 180 = 36 (S) · 3/8 of 48 = 18 (N) · 2/3 of 51 = 34 (D) · 1/2 of 66 = 33 (R) · 2/8 of 96 = 24 (M) · 2/4 of 38 = 19 (O)

Clue 2 (Order of operations): "THE SUSPECT WAS WRITING WITH A RIGHT HAND"

34 + 4 × 6 = 58 (T) · 10 × 7 - 7 = 63 (G) · 3 + 3 × 5 = 18 (C) · 6 × 6 - 28 = 8 (U) · 5 × 12 - 10 = 50 (R) · 9 × 10 - 19 = 71 (W) · 8 × 10 - 29 = 51 (S) · 9 × 6 - 2 = 52 (H) · 10 × 9 - 22 = 68 (N) · 13 + 7 × 2 = 27 (I) · 37 + 9 × 3 = 64 (D) · 18 + 6 × 4 = 42 (P) · 7 + 5 × 6 = 37 (A) · 12 × 8 - 27 = 69 (E)

Clue 3 (Multiplication facts (1-12)): "A CLOUD OF SNEEZE POWDER DUSTED THE FLOOR"

2 × 11 = 22 (A) · 8 × 12 = 96 (D) · 7 × 12 = 84 (Z) · 7 × 4 = 28 (L) · 11 × 8 = 88 (C) · 1 × 10 = 10 (R) · 5 × 7 = 35 (H) · 5 × 1 = 5 (S) · 10 × 6 = 60 (E) · 2 × 2 = 4 (P) · 3 × 3 = 9 (U) · 12 × 6 = 72 (N) · 11 × 6 = 66 (W) · 12 × 10 = 120 (T) · 3 × 5 = 15 (F) · 10 × 8 = 80 (O)

Clue 4 (Rounding): "STRANDS OF INK BLACK HAIR WERE IN STACKS"

Round 4,325 to the nearest hundred = 4300 (S) · Round 29 to the nearest ten = 30 (H) · Round 249 to the nearest hundred = 200 (F) · Round 680 to the nearest hundred = 700 (C) · Round 6,911 to the nearest thousand = 7000 (T) · Round 52 to the nearest ten = 50 (D) · Round 432 to the nearest ten = 430 (I) · Round 2,321 to the nearest hundred = 2300 (L) · Round 2,920 to the nearest hundred = 2900 (A) · Round 1,094 to the nearest hundred = 1100 (E) · Round 233 to the nearest ten = 230 (K) · Round 897 to the nearest hundred = 900 (N) · Round 373 to the nearest ten = 370 (O) · Round 289 to the nearest ten = 290 (R) · Round 1,253 to the nearest hundred = 1300 (W) · Round 1,693 to the nearest hundred = 1700 (B)

Clue 5 (Division facts (1-12)): surviving statement is box 2 → Mason Paper

70 ÷ 10 = 7 · 84 ÷ 7 = 12 · 36 ÷ 4 = 9 · 56 ÷ 7 = 8 · 3 ÷ 3 = 1 · 30 ÷ 5 = 6 · 5 ÷ 1 = 5 · 3 ÷ 1 = 3 · 66 ÷ 6 = 11 · 24 ÷ 6 = 4 · 20 ÷ 2 = 10