



The Case of the Missing Manuscript

Grade 4 math · Place value, Addition, Fractions of a number, Subtraction, Missing addends · Reading level grades 3-4

Detective: _____ Date: _____

The legendary Golden Book of Riddles has vanished from the vault! The Head Librarian needs your help to find the culprit before the library closes.

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 Page Snatcher is _____

Possible suspects

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

NAME	SUPER SCHOLAR POWER	VAULT GADGET	WRITING STYLE	INK HAIR COLOR	SILLY SLIP UP
Jules Verne	Speed Reading	Feather Quill	Right handed writer	Paper White Hair	Squeaky Boots
J R R Tolkien	Speed Reading	Leather Satchel	Left handed writer	Leather Brown Hair	Squeaky Boots
Paige Turner	Paper Folding	Glowing Magnifier	Left handed writer	Leather Brown Hair	Squeaky Boots
Edgar Poe	Ink Mimicry	Feather Quill	Right handed writer	Leather Brown Hair	Squeaky Boots
Mary Shelley	Bookmark Teleport	Leather Satchel	Right handed writer	Paper White Hair	Sticky Fingers
Emily Dickinson	Paper Folding	Feather Quill	Right handed writer	Ink Blue Hair	Squeaky Boots
Dr Seuss	Paper Folding	Feather Quill	Right handed writer	Ink Blue Hair	Sticky Fingers
Hans Andersen	Paper Folding	Glowing Magnifier	Right handed writer	Leather Brown Hair	Loud Sneezes
Enid Blyton	Bookmark Teleport	Invisibility Dust	Left handed writer	Leather Brown Hair	Sticky Fingers
Charles Dickens	Paper Folding	Glowing Magnifier	Right handed writer	Leather Brown Hair	Squeaky Boots
Louisa Alcott	Ink Mimicry	Invisibility Dust	Left handed writer	Ink Blue Hair	Squeaky Boots
Arthur Conan	Bookmark Teleport	Glowing Magnifier	Right handed writer	Leather Brown Hair	Squeaky Boots
Beatrix Potter	Paper Folding	Invisibility Dust	Right handed writer	Leather Brown Hair	Squeaky Boots
Shel Silverstein	Speed Reading	Invisibility Dust	Right handed writer	Leather Brown Hair	Squeaky Boots
Mark Twain	Speed Reading	Invisibility Dust	Right handed writer	Ink Blue Hair	Loud Sneezes
Jane Austen	Speed Reading	Feather Quill	Left handed writer	Paper White Hair	Sticky Fingers
Bram Stoker	Paper Folding	Invisibility Dust	Right handed writer	Ink Blue Hair	Loud Sneezes
C S Lewis	Speed Reading	Brass Bookmark	Left handed writer	Ink Blue Hair	Loud Sneezes
Robert Stevenson	Paper Folding	Invisibility Dust	Right handed writer	Leather Brown Hair	Sticky Fingers
Lewis Carroll	Bookmark Teleport	Glowing Magnifier	Left handed writer	Paper White Hair	Loud Sneezes
Beverly Cleary	Ink Mimicry	Invisibility Dust	Right handed writer	Paper White Hair	Squeaky Boots

CLUE 1 Place value

The thief left a numeric lock code written on a scrap of paper but some digits are in the wrong place value column. Let us fix the place values to open the drawer with the first clue.

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

T			T											T				
20	600	60	20	600	5000	60	70	200	100	60	50	4000	100	20	600	30	1000	60
30	70	60	30	20	600	60	2000	80	900	5000	700	700						

What is the value of the 2 in 428? → **T**

What is the value of the 6 in 1,962? → **E**

What is the value of the 4 in 4,853? → **N**

What is the value of the 6 in 628? → **H**

What is the value of the 3 in 1,436? → **A**

What is the value of the 7 in 5,751? → **L**

What is the value of the 8 in 680? → **Q**

What is the value of the 5 in 85,792? → **I**

What is the value of the 2 in 2,359? → **R**

What is the value of the 7 in 970? → **F**

What is the value of the 2 in 294? → **D**

What is the value of the 1 in 150? → **O**

What is the value of the 5 in 9,956? → **S**

What is the value of the 9 in 960? → **U**

What is the value of the 1 in 1,282? → **V**

Scratch space:

CLUE 2 Addition

To find the second clue we need to count all the returned adventure novels and mystery novels on the cart.
Adding these book stacks together will unlock the next shelf.

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

T					T													
5364	4663	7350	4380	3625	5364	7350	6814	7854	7350	4144	7350	8031	4268	9277	7350	5522	3798	4268
				T										T				
4144	4537	6397	4663	5364	4663	4268	4380	9277	7350	9277	7854	4144	4537	5364	7350	4144		

$2343 + 3021 = \square \rightarrow \text{T}$	$1449 + 2931 = \square \rightarrow \text{N}$	$2271 + 1527 = \square \rightarrow \text{Y}$
$3127 + 3270 = \square \rightarrow \text{G}$	$4851 + 2499 = \square \rightarrow \text{E}$	$3743 + 5534 = \square \rightarrow \text{D}$
$3099 + 4932 = \square \rightarrow \text{M}$	$3093 + 1444 = \square \rightarrow \text{I}$	$4431 + 3423 = \square \rightarrow \text{W}$
$1719 + 2944 = \square \rightarrow \text{H}$	$3271 + 3543 = \square \rightarrow \text{S}$	$2703 + 1441 = \square \rightarrow \text{R}$
$1775 + 1850 = \square \rightarrow \text{O}$	$3579 + 1943 = \square \rightarrow \text{B}$	$2509 + 1759 = \square \rightarrow \text{A}$

Scratch space:

CLUE 3

Fractions of a number

The thief tore out a fraction of the pages from a cookbook. If we calculate exactly how many pages are missing out of the total we can read the secret clue written on the spine.

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

Diagram illustrating a sequence of numbers and markers (S) arranged in two rows. The numbers are grouped into sets of four, with markers (S) placed at the end of each group.

Row 1: 37 (S), 32, 6, 2, 24, 8, 36, 33, 12, 12, 27, 37 (S), 35, 24, 10, 2, 24, 19, 24, 36.

Row 2: 27, 13, 2, 26, 20, 28, 12, 37 (S), 26, 27, 26, 12, 40.

$$1/3 \text{ of } 111 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$4/10 \text{ of } 65 = \boxed{} \rightarrow \boxed{}$$

$$2/8 \text{ of } 52 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$5/10 \text{ of } 12 = \boxed{} \rightarrow \boxed{\text{U}}$$

$2/4$ of 20 = $\rightarrow$ **V**

$5/6$ of 42 = $\rightarrow$ **G**

$$2/8 \text{ of } 48 = \boxed{} \rightarrow \boxed{0}$$

$$2/10 \text{ of } 160 = \boxed{} \rightarrow \boxed{\text{Q}}$$

5/8 of 64 = → **N**

$$\frac{1}{2} \text{ of } 48 = \boxed{} \rightarrow \boxed{\mathbf{A}}$$

$$4/10 \text{ of } 50 = \boxed{} \rightarrow \boxed{\text{R}}$$

6/10 of 60 = → **Y**

$1/6$ of 12 = $\rightarrow$ **E**

2/6 of 57 = → **W**

$1/2$ of 16 = $\rightarrow$ **K**

$$\frac{1}{4} \text{ of } 132 = \boxed{} \rightarrow \boxed{\mathbf{B}}$$

$$2/5 \text{ of } 70 = \boxed{} \rightarrow \boxed{\text{P}}$$

9/10 of 30 = → **T**

Scratch space:

CLUE 4

Subtraction

The library's bookmark jar is missing many items. Subtract the bookmarks left on the table from the original count to see how many the thief dropped on their way out.

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

A									A									
6408	3810	3889	4346	6376	1411	6156	1411	6156	6408	6017	3298	6156	6857	2440	6857	2305	2575	4346

	A				A								
3298	6408	3889	6857	2575	6408	3810	3810	3683	2305	6017	6017	6156	7943

$10772 - 4364 = \square \rightarrow \boxed{A}$

$10242 - 4086 = \square \rightarrow \boxed{E}$

$3259 - 1848 = \square \rightarrow \boxed{L}$

$3810 - 1235 = \square \rightarrow \boxed{W}$

$8867 - 4521 = \square \rightarrow \boxed{N}$

$7122 - 1105 = \square \rightarrow \boxed{T}$

$11330 - 4954 = \square \rightarrow \boxed{G}$

$5946 - 2136 = \square \rightarrow \boxed{S}$

$8365 - 422 = \square \rightarrow \boxed{D}$

$7039 - 3741 = \square \rightarrow \boxed{H}$

$5278 - 1389 = \square \rightarrow \boxed{I}$

$6054 - 2371 = \square \rightarrow \boxed{P}$

$10867 - 4010 = \square \rightarrow \boxed{R}$

$3557 - 1252 = \square \rightarrow \boxed{O}$

$7323 - 4883 = \square \rightarrow \boxed{B}$

Scratch space:

CLUE 5**Missing addends - the last clue**

We need a total of twenty library keycards to lock the doors but some are missing. Solve for the missing number of keycards to secure the room and reveal the final clue.

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:

$18 + \underline{\quad} = 26$

$22 + \underline{\quad} = 25$

$15 + \underline{\quad} = 16$

$19 + \underline{\quad} = 31$

$32 + \underline{\quad} = 41$

$35 + \underline{\quad} = 41$

$33 + \underline{\quad} = 40$

$4 + \underline{\quad} = 15$

$23 + \underline{\quad} = 33$

$7 + \underline{\quad} = 9$

$35 + \underline{\quad} = 39$

Step 2 - cross out the sentence with each answer:

1. The villain swipes the ancient scroll, then hides inside a giant encyclopedia.
2. The villain tiptoes over the creaky floorboards, then hides inside a giant encyclopedia.
3. The villain cracks the secret vault lock, then hides inside a giant encyclopedia.
4. The villain slips past the security owl, then escapes into the stormy night.
5. The villain sneaks through the comic section, then flees out the library window.
6. The villain swipes the ancient scroll, then zips away on a flying book.
7. The villain sneaks through the comic section, then zips away on a flying book.
8. The villain swipes the ancient scroll, then flees out the library window.
9. The villain sneaks through the comic section, then scampers down the spiral stairs.
10. The villain tiptoes over the creaky floorboards, then flees out the library window.
11. The villain slips past the security owl, then zips away on a flying book.
12. The villain tiptoes over the creaky floorboards, then escapes into the stormy night.

Answer Key

The Case of the Missing Manuscript

Culprit: Arthur Conan

Bookmark Teleport · Glowing Magnifier · Right handed writer · Leather Brown Hair · Squeaky Boots

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

Clue 1 (Place value): "THE THIEF DOES NOT HAVE A FEATHER QUILL"

What is the value of the 2 in 428? = 20 (T) · What is the value of the 6 in 1,962? = 60 (E) · What is the value of the 4 in 4,853? = 4000 (N) · What is the value of the 6 in 628? = 600 (H) · What is the value of the 3 in 1,436? = 30 (A) · What is the value of the 7 in 5,751? = 700 (L) · What is the value of the 8 in 680? = 80 (Q) · What is the value of the 5 in 85,792? = 5000 (I) · What is the value of the 2 in 2,359? = 2000 (R) · What is the value of the 7 in 970? = 70 (F) · What is the value of the 2 in 294? = 200 (D) · What is the value of the 1 in 150? = 100 (O) · What is the value of the 5 in 9,956? = 50 (S) · What is the value of the 9 in 960? = 900 (U) · What is the value of the 1 in 1,282? = 1000 (V)

Clue 2 (Addition): "THE NOTES WERE MADE BY A RIGHT HANDED WRITER"

2343 + 3021 = 5364 (T) · 1449 + 2931 = 4380 (N) · 2271 + 1527 = 3798 (Y) · 3127 + 3270 = 6397 (G) · 4851 + 2499 = 7350 (E) · 3743 + 5534 = 9277 (D) · 3099 + 4932 = 8031 (M) · 3093 + 1444 = 4537 (I) · 4431 + 3423 = 7854 (W) · 1719 + 2944 = 4663 (H) · 3271 + 3543 = 6814 (S) · 2703 + 1441 = 4144 (R) · 1775 + 1850 = 3625 (O) · 3579 + 1943 = 5522 (B) · 2509 + 1759 = 4268 (A)

Clue 3 (Fractions of a number): "SQUEAKY BOOTS GAVE AWAY THEIR POSITION"

1/3 of 111 = 37 (S) · 4/10 of 65 = 26 (I) · 2/8 of 52 = 13 (H) · 5/10 of 12 = 6 (U) · 2/4 of 20 = 10 (V) · 5/6 of 42 = 35 (G) · 2/8 of 48 = 12 (O) · 2/10 of 160 = 32 (Q) · 5/8 of 64 = 40 (N) · 1/2 of 48 = 24 (A) · 4/10 of 50 = 20 (R) · 6/10 of 60 = 36 (Y) · 1/6 of 12 = 2 (E) · 2/6 of 57 = 19 (W) · 1/2 of 16 = 8 (K) · 1/4 of 132 = 33 (B) · 2/5 of 70 = 28 (P) · 9/10 of 30 = 27 (T)

Clue 4 (Subtraction): "A SINGLE LEATHER BROWN HAIR WAS SPOTTED"

10772 - 4364 = 6408 (A) · 10242 - 4086 = 6156 (E) · 3259 - 1848 = 1411 (L) · 3810 - 1235 = 2575 (W) · 8867 - 4521 = 4346 (N) · 7122 - 1105 = 6017 (T) · 11330 - 4954 = 6376 (G) · 5946 - 2136 = 3810 (S) · 8365 - 422 = 7943 (D) · 7039 - 3741 = 3298 (H) · 5278 - 1389 = 3889 (I) · 6054 - 2371 = 3683 (P) · 10867 - 4010 = 6857 (R) · 3557 - 1252 = 2305 (O) · 7323 - 4883 = 2440 (B)

Clue 5 (Missing addends): surviving statement is box 5 → Arthur Conan

18 + ___ = 26 = 8 · 22 + ___ = 25 = 3 · 15 + ___ = 16 = 1 · 19 + ___ = 31 = 12 · 32 + ___ = 41 = 9 · 35 + ___ = 41 = 6 · 33 + ___ = 40 = 7 · 4 + ___ = 15 = 11 · 23 + ___ = 33 = 10 · 7 + ___ = 9 = 2 · 35 + ___ = 39 = 4