



The Great Louvre Masterpiece Mystery

Grade 5 math · Rounding, Fractions of a number, Order of operations, Multiplication, Division · Reading level grades 3-4

Detective: _____ Date: _____

Oh no! A sneaky thief has swapped the priceless Mona Lisa with a silly crayon drawing! We must help the museum staff search the grand halls of Paris, check the clues, and find the culprit before the tourists arrive.

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 Art Thief is _____

Possible suspects

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

NAME	ART MEDIUM	MUSEUM DISGUISE	DOMINANT HAND	HAIR COLOR	DETERRENT
Henri Cutout	watercolor	striped shirt	left handed	neon pink	squeaky shoes
Pablo Cubist	watercolor	security badge	right handed	neon pink	squeaky shoes
Gustav Gold	spray paint	security badge	left handed	canvas white	squeaky shoes
Rembrandt Glow	sketch charcoal	security badge	right handed	ink black	squeaky shoes
Mary Pastel	sketch charcoal	security badge	left handed	canvas white	squeaky shoes
Pierre Row	spray paint	beret hat	left handed	neon pink	squeaky shoes
Johannes Pearl	spray paint	tour guide vest	left handed	neon pink	squeaky shoes
Frida Brow	watercolor	fancy scarf	left handed	neon pink	squeaky shoes
Salvador Time	spray paint	striped shirt	left handed	ink black	bright flashlight
Vincent Star	oil paint	tour guide vest	right handed	canvas white	loud alarm
Leo DaVinci	watercolor	striped shirt	right handed	ink black	loud alarm
Georgia Bloom	sketch charcoal	striped shirt	left handed	ink black	squeaky shoes
Edgar Dance	spray paint	beret hat	left handed	neon pink	loud alarm
Auguste Clay	sketch charcoal	beret hat	left handed	canvas white	squeaky shoes
Rene Pipe	sketch charcoal	tour guide vest	left handed	neon pink	squeaky shoes
Paul Mount	spray paint	tour guide vest	left handed	canvas white	squeaky shoes
Michel Angel	oil paint	tour guide vest	right handed	ink black	squeaky shoes
Edward Scream	clay sculpture	beret hat	right handed	canvas white	squeaky shoes
Jackson Splat	watercolor	tour guide vest	left handed	neon pink	bright flashlight
Claude Monet	sketch charcoal	tour guide vest	right handed	canvas white	bright flashlight
Andy Pop	clay sculpture	beret hat	right handed	ink black	bright flashlight

CLUE 1 Rounding

We checked the digital ticket scanner near the statue. The screen only shows rounded numbers to the nearest ten. Round the visitor count to find our first big clue!

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

T			T											T					
110	3700	1700	110	3700	7000	1700	50	2900	2300	1700	230	30	2300	110	130	1700	370	300	
370	50	370	30	20	3000	230	20	370	300	50									

Round 107 to the nearest ten → **T**

Round 308 to the nearest hundred → **R**

Round 2,852 to the nearest hundred → **D**

Round 366 to the nearest ten → **A**

Round 1,747 to the nearest hundred → **E**

Round 132 to the nearest ten → **W**

Round 29 to the nearest ten → **N**

Round 22 to the nearest ten → **C**

Round 3,058 to the nearest thousand → **Y**

Round 6,846 to the nearest thousand → **I**

Round 49 to the nearest ten → **F**

Round 2,317 to the nearest hundred → **O**

Round 3,731 to the nearest hundred → **H**

Round 233 to the nearest ten → **S**

Scratch space:

CLUE 2

Fractions of a number

The culprit dropped a tray of watercolor paints. A fraction of the colors are smeared, but counting the clean ones will tell us how the villain writes!

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

L																	
19	27	22	17	38	11	4	23	27	23	40	32	34	23	2	27	40	
				L										L			
3	27	14	27	19	27	22	17	6	4	17	38	27	2	19	11	40	40

$1/3$ of 57 = → L	$1/3$ of 114 = → H	$1/3$ of 81 = → E
$2/3$ of 9 = → O	$1/10$ of 170 = → T	$2/6$ of 66 = → F
$1/2$ of 6 = → W	$1/6$ of 138 = → D	$1/3$ of 33 = → A
$1/5$ of 200 = → S	$2/5$ of 35 = → R	$8/10$ of 40 = → M
$2/3$ of 6 = → N	$1/4$ of 136 = → U	$2/10$ of 10 = → G

Scratch space:

CLUE 3

Order of operations

To open the locked security room door, we must solve a multi-step math equation on the keypad. Solve the steps in the correct order to reveal their main weakness!

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

T																	
45	47	69	26	67	18	18	57	67	80	35	18	69	53	31	47	69	80

T															
45	47	69	79	47	52	69	79	79	71	58	69	57	68	69	53

$5 \times 11 - 10 = \square \rightarrow \boxed{\text{T}}$

$55 + 8 \times 2 = \square \rightarrow \boxed{\text{Q}}$

$11 \times 8 - 19 = \square \rightarrow \boxed{\text{E}}$

$2 + 3 \times 8 = \square \rightarrow \boxed{\text{V}}$

$9 \times 7 - 16 = \square \rightarrow \boxed{\text{H}}$

$6 \times 10 - 2 = \square \rightarrow \boxed{\text{U}}$

$17 + 6 \times 3 = \square \rightarrow \boxed{\text{F}}$

$9 \times 4 - 18 = \square \rightarrow \boxed{\text{L}}$

$20 + 8 \times 6 = \square \rightarrow \boxed{\text{K}}$

$11 \times 3 - 2 = \square \rightarrow \boxed{\text{W}}$

$7 \times 11 - 10 = \square \rightarrow \boxed{\text{I}}$

$10 \times 8 - 1 = \square \rightarrow \boxed{\text{S}}$

$6 \times 10 - 7 = \square \rightarrow \boxed{\text{D}}$

$7 \times 9 - 11 = \square \rightarrow \boxed{\text{O}}$

$9 \times 12 - 28 = \square \rightarrow \boxed{\text{N}}$

$33 + 3 \times 8 = \square \rightarrow \boxed{\text{A}}$

Scratch space:

CLUE 4

Multiplication facts (1-12)

A suspicious person ran through the gallery of ancient pottery. We count the rows of display cases and multiply them to uncover a strand of hair!

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

A											A				A				
121	54	56	63	2	7	33	63	2	144	56	121	63	4	18	121	54	110	2	
132	56	14	60	110	2	121	108	63	54	121									

$11 \times 11 = \square \rightarrow \boxed{\text{A}}$

$8 \times 7 = \square \rightarrow \boxed{\text{H}}$

$9 \times 2 = \square \rightarrow \boxed{\text{W}}$

$9 \times 6 = \square \rightarrow \boxed{\text{S}}$

$6 \times 10 = \square \rightarrow \boxed{\text{M}}$

$2 \times 2 = \square \rightarrow \boxed{\text{R}}$

$7 \times 2 = \square \rightarrow \boxed{\text{E}}$

$7 \times 1 = \square \rightarrow \boxed{\text{Y}}$

$9 \times 12 = \square \rightarrow \boxed{\text{L}}$

$3 \times 11 = \square \rightarrow \boxed{\text{P}}$

$9 \times 7 = \square \rightarrow \boxed{\text{I}}$

$11 \times 12 = \square \rightarrow \boxed{\text{T}}$

$2 \times 1 = \square \rightarrow \boxed{\text{N}}$

$10 \times 11 = \square \rightarrow \boxed{\text{O}}$

$12 \times 12 = \square \rightarrow \boxed{\text{K}}$

Scratch space:

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

The guards found a box of stolen art supplies in the garden. Divide these items equally among the search teams to locate 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:

$20 \div 5 = \boxed{}$

$56 \div 7 = \boxed{}$

$2 \div 2 = \boxed{}$

$66 \div 6 = \boxed{}$

$9 \div 1 = \boxed{}$

$14 \div 2 = \boxed{}$

$30 \div 3 = \boxed{}$

$24 \div 8 = \boxed{}$

$12 \div 1 = \boxed{}$

$15 \div 3 = \boxed{}$

$14 \div 7 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain painted over the secret museum map, then jumped into a waiting taxi cab.
2. The villain swapped the portrait with a copy, then blended in with a tour group.
3. The villain swapped the portrait with a copy, then jumped into a waiting taxi cab.
4. The villain painted over the secret museum map, then ran down the grand spiral stairs.
5. The villain swapped the portrait with a copy, then escaped through the glass pyramid.
6. The villain drew a mustache on the statue, then jumped into a waiting taxi cab.
7. The villain hid the ancient vase in a bin, then escaped through the glass pyramid.
8. The villain took the golden frame off the wall, then escaped through the glass pyramid.
9. The villain took the golden frame off the wall, then ran down the grand spiral stairs.
10. The villain hid the ancient vase in a bin, then blended in with a tour group.
11. The villain drew a mustache on the statue, then blended in with a tour group.
12. The villain drew a mustache on the statue, then escaped through the glass pyramid.

Answer Key

The Great Louvre Masterpiece Mystery

Culprit: Rene Pipe

sketch charcoal · tour guide vest · left handed · neon pink · squeaky shoes

Trail: Start 21 → Clue 1 20 → Clue 2 12 → Clue 3 9 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE THIEF DOES NOT WEAR A FANCY SCARF"

Round 107 to the nearest ten = 110 (T) · Round 308 to the nearest hundred = 300 (R) · Round 2,852 to the nearest hundred = 2900 (D) · Round 366 to the nearest ten = 370 (A) · Round 1,747 to the nearest hundred = 1700 (E) · Round 132 to the nearest ten = 130 (W) · Round 29 to the nearest ten = 30 (N) · Round 22 to the nearest ten = 20 (C) · Round 3,058 to the nearest thousand = 3000 (Y) · Round 6,846 to the nearest thousand = 7000 (I) · Round 49 to the nearest ten = 50 (F) · Round 2,317 to the nearest hundred = 2300 (O) · Round 3,731 to the nearest hundred = 3700 (H) · Round 233 to the nearest ten = 230 (S)

Clue 2 (Fractions of a number): "LEFT HANDED SMUDGES WERE LEFT ON THE GLASS"

$\frac{1}{3}$ of 57 = 19 (L) · $\frac{1}{3}$ of 114 = 38 (H) · $\frac{1}{3}$ of 81 = 27 (E) · $\frac{2}{3}$ of 9 = 6 (O) · $\frac{1}{10}$ of 170 = 17 (T) · $\frac{2}{6}$ of 66 = 22 (F) · $\frac{1}{2}$ of 6 = 3 (W) · $\frac{1}{6}$ of 138 = 23 (D) · $\frac{1}{3}$ of 33 = 11 (A) · $\frac{1}{5}$ of 200 = 40 (S) · $\frac{2}{5}$ of 35 = 14 (R) · $\frac{8}{10}$ of 40 = 32 (M) · $\frac{2}{3}$ of 6 = 4 (N) · $\frac{1}{4}$ of 136 = 34 (U) · $\frac{2}{10}$ of 10 = 2 (G)

Clue 3 (Order of operations): "THE VILLAIN FLED WHEN THE SHOES SQUEAKED"

$5 \times 11 - 10 = 45$ (T) · $55 + 8 \times 2 = 71$ (Q) · $11 \times 8 - 19 = 69$ (E) · $2 + 3 \times 8 = 26$ (V) · $9 \times 7 - 16 = 47$ (H) · $6 \times 10 - 2 = 58$ (U) · $17 + 6 \times 3 = 35$ (F) · $9 \times 4 - 18 = 18$ (L) · $20 + 8 \times 6 = 68$ (K) · $11 \times 3 - 2 = 31$ (W) · $7 \times 11 - 10 = 67$ (I) · $10 \times 8 - 1 = 79$ (S) · $6 \times 10 - 7 = 53$ (D) · $7 \times 9 - 11 = 52$ (O) · $9 \times 12 - 28 = 80$ (N) · $33 + 3 \times 8 = 57$ (A)

Clue 4 (Multiplication facts (1-12)): "A SHINY PINK HAIR WAS ON THE MONA LISA"

$11 \times 11 = 121$ (A) · $8 \times 7 = 56$ (H) · $9 \times 2 = 18$ (W) · $9 \times 6 = 54$ (S) · $6 \times 10 = 60$ (M) · $2 \times 2 = 4$ (R) · $7 \times 2 = 14$ (E) · $7 \times 1 = 7$ (Y) · $9 \times 12 = 108$ (L) · $3 \times 11 = 33$ (P) · $9 \times 7 = 63$ (I) · $11 \times 12 = 132$ (T) · $2 \times 1 = 2$ (N) · $10 \times 11 = 110$ (O) · $12 \times 12 = 144$ (K)

Clue 5 (Division facts (1-12)): surviving statement is box 6 → Rene Pipe

$20 \div 5 = 4$ · $56 \div 7 = 8$ · $2 \div 2 = 1$ · $66 \div 6 = 11$ · $9 \div 1 = 9$ · $14 \div 2 = 7$ · $30 \div 3 = 10$ · $24 \div 8 = 3$ · $12 \div 1 = 12$ · $15 \div 3 = 5$ · $14 \div 7 = 2$