



The Mystery of the Missing Blue Ribbon

Grade 3 math · Addition, Subtraction, Multiplication, Rounding, Division · Reading level grades 3-4

Detective: _____ Date: _____

Just hours before the annual championship horse show, the grand trophy and blue ribbon vanished from the main arena office! Dust prints and scattered horse treats were left behind at the scene.

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 ribbon thief is _____

Possible suspects

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

NAME	SADDLE TYPE	FAVORITE TREAT	REIN HAND	RIDER HAIRSTYLE	HORSE SPOOK TRIGGER
Benjamin Adams	English Saddle	Oat Biscuits	Rides Right Handed	Braided Mane Bun	Loud Thunder
James Mitchell	English Saddle	Oat Biscuits	Rides Left Handed	Low Ponytail	Muddy Puddles
Charlotte Green	Bareback Pad	Crisp Apples	Rides Left Handed	Low Ponytail	Muddy Puddles
Mia White	English Saddle	Peanut Butter Treats	Rides Right Handed	Braided Mane Bun	Loud Thunder
Alexander Phillips	Side Saddle	Sugar Cubes	Rides Left Handed	Braided Mane Bun	Loud Thunder
Mason Nelson	Treeless Saddle	Crisp Apples	Rides Left Handed	Braided Mane Bun	Flapping Flags
Sammy Brooks	Western Saddle	Peanut Butter Treats	Rides Left Handed	Braided Mane Bun	Loud Thunder
Maya Miller	Bareback Pad	Peanut Butter Treats	Rides Left Handed	Curly Flowing Hair	Flapping Flags
Jackson Parker	Western Saddle	Oat Biscuits	Rides Right Handed	Braided Mane Bun	Flapping Flags
Oliver King	Treeless Saddle	Crisp Apples	Rides Right Handed	Braided Mane Bun	Loud Thunder
Ella Turner	Treeless Saddle	Oat Biscuits	Rides Left Handed	Curly Flowing Hair	Loud Thunder
Liam Reed	Bareback Pad	Peanut Butter Treats	Rides Left Handed	Braided Mane Bun	Loud Thunder
Noah Taylor	Treeless Saddle	Oat Biscuits	Rides Right Handed	Curly Flowing Hair	Flapping Flags
Lucas Scott	Side Saddle	Crisp Apples	Rides Right Handed	Low Ponytail	Loud Thunder
Ava Robinson	Bareback Pad	Crisp Apples	Rides Right Handed	Braided Mane Bun	Muddy Puddles
Logan Roberts	Treeless Saddle	Crisp Apples	Rides Right Handed	Low Ponytail	Muddy Puddles
Zoe Jenkins	Western Saddle	Peanut Butter Treats	Rides Right Handed	Curly Flowing Hair	Flapping Flags
Chloe Davis	Bareback Pad	Sugar Cubes	Rides Right Handed	Braided Mane Bun	Loud Thunder
Abigail Perez	Treeless Saddle	Sweet Carrots	Rides Right Handed	Low Ponytail	Loud Thunder
Evelyn Carter	Side Saddle	Oat Biscuits	Rides Left Handed	Curly Flowing Hair	Muddy Puddles
Harper Hill	English Saddle	Sweet Carrots	Rides Right Handed	Braided Mane Bun	Loud Thunder

CLUE 1 Addition

We counted all the leather bridles in the tack room to unlock the first clue box.

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

T																T
898	445	614	553	780	237	237	546	780	852	731	376	614	783	852	376	898
298	783	614	783	298	341	546	848	718	298	578	614	783				

$361 + 537 = \square \rightarrow$ T	$188 + 153 = \square \rightarrow$ G	$107 + 130 = \square \rightarrow$ L
$200 + 245 = \square \rightarrow$ H	$253 + 123 = \square \rightarrow$ O	$305 + 273 = \square \rightarrow$ B
$471 + 260 = \square \rightarrow$ D	$315 + 533 = \square \rightarrow$ R	$204 + 94 = \square \rightarrow$ U
$290 + 256 = \square \rightarrow$ A	$242 + 311 = \square \rightarrow$ V	$409 + 374 = \square \rightarrow$ S
$259 + 459 = \square \rightarrow$ C	$443 + 337 = \square \rightarrow$ I	$521 + 331 = \square \rightarrow$ N
$350 + 264 = \square \rightarrow$ E		

Scratch space:

CLUE 2

Subtraction

We subtracted the missing jump poles from the total set to uncover a hidden note.

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

T					T														T
556	133	483	437	614	556	325	483	112	112	112	735	437	735	458	614	786	133	556	
133	735	325	327	483	327	458	614	327	483	458									

$908 - 352 = \square \rightarrow \boxed{\text{T}}$

$470 - 12 = \square \rightarrow \boxed{\text{R}}$

$510 - 377 = \square \rightarrow \boxed{\text{H}}$

$553 - 70 = \square \rightarrow \boxed{\text{E}}$

$295 - 183 = \square \rightarrow \boxed{\text{S}}$

$589 - 262 = \square \rightarrow \boxed{\text{D}}$

$775 - 161 = \square \rightarrow \boxed{\text{I}}$

$1053 - 318 = \square \rightarrow \boxed{\text{A}}$

$737 - 300 = \square \rightarrow \boxed{\text{W}}$

$950 - 164 = \square \rightarrow \boxed{\text{G}}$

$327 - 2 = \square \rightarrow \boxed{\text{N}}$

Scratch space:

CLUE 3

Multiplication facts (1-12)

We multiplied the rows of stalls by the number of horses to crack the gate code.

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

T																		
7	42	56	84	35	120	120	64	35	24	54	64	6	6	50	64	4	56	22

						T						
11	44	120	10	32	22	7	42	32	24	22	56	4

$7 \times 1 = \square \rightarrow \text{T}$

$6 \times 9 = \square \rightarrow \text{W}$

$4 \times 1 = \square \rightarrow \text{R}$

$11 \times 2 = \square \rightarrow \text{D}$

$3 \times 8 = \square \rightarrow \text{N}$

$7 \times 5 = \square \rightarrow \text{I}$

$10 \times 5 = \square \rightarrow \text{C}$

$7 \times 8 = \square \rightarrow \text{E}$

$8 \times 4 = \square \rightarrow \text{U}$

$4 \times 11 = \square \rightarrow \text{Y}$

$6 \times 7 = \square \rightarrow \text{H}$

$7 \times 12 = \square \rightarrow \text{V}$

$12 \times 10 = \square \rightarrow \text{L}$

$1 \times 11 = \square \rightarrow \text{B}$

$6 \times 1 = \square \rightarrow \text{S}$

$1 \times 10 = \square \rightarrow \text{O}$

$8 \times 8 = \square \rightarrow \text{A}$

Scratch space:

Rounding

The digital scoreboard rounded our total ride time and flashed the next clue.

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

Round 7,640 to the nearest thousand → **A**

Round 863 to the nearest hundred $\rightarrow$ **U**

Round 187 to the nearest hundred $\rightarrow$ **E**

Round 94 to the nearest ten $\rightarrow$ **F**

Round 839 to the nearest hundred $\rightarrow$ **S**

Round 626 to the nearest hundred $\rightarrow$ **N**

Round 1,576 to the nearest thousand $\rightarrow$ **L**

Round 6,668 to the nearest thousand $\rightarrow$ **M**

Round 37 to the nearest ten $\rightarrow$ **T**

Round 2,995 to the nearest thousand → **D**

Round 20 to the nearest ten $\rightarrow$ **B**

Round 79 to the nearest ten $\rightarrow$ **W**

Round 34 to the nearest ten $\rightarrow$ **H**

Round 262 to the nearest hundred $\rightarrow$ **R**

Round 8,693 to the nearest thousand $\rightarrow$

Scratch space:

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

We divided the bag of treats equally among the paddocks to reveal the final hint.

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:

$24 \div 2 = \boxed{}$

$48 \div 12 = \boxed{}$

$4 \div 4 = \boxed{}$

$10 \div 5 = \boxed{}$

$54 \div 9 = \boxed{}$

$40 \div 8 = \boxed{}$

$36 \div 12 = \boxed{}$

$30 \div 3 = \boxed{}$

$44 \div 4 = \boxed{}$

$63 \div 9 = \boxed{}$

$96 \div 12 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain adjusted the english saddle, then shared the oat biscuits.
2. The villain secured the treeless saddle, then fed the horse sweet carrots.
3. The villain adjusted the english saddle, then dropped some sugar cubes.
4. The villain adjusted the english saddle, then fed the horse sweet carrots.
5. The villain polished the side saddle, then dropped some sugar cubes.
6. The villain strapped on the western saddle, then dropped some sugar cubes.
7. The villain strapped on the western saddle, then shared the oat biscuits.
8. The villain buckled the bareback pad, then offered peanut butter treats.
9. The villain adjusted the english saddle, then offered peanut butter treats.
10. The villain polished the side saddle, then shared the oat biscuits.
11. The villain secured the treeless saddle, then shared the oat biscuits.
12. The villain secured the treeless saddle, then snacked on crisp apples.

Answer Key

The Mystery of the Missing Blue Ribbon

Culprit: Mia White

English Saddle · Peanut Butter Treats · Rides Right Handed · Braided Mane Bun · Loud Thunder

Trail: Start 21 → Clue 1 19 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT USE SUGAR CUBES"

$361 + 537 = 898$ (T) · $188 + 153 = 341$ (G) · $107 + 130 = 237$ (L) · $200 + 245 = 445$ (H) · $253 + 123 = 376$ (O) · $305 + 273 = 578$ (B) · $471 + 260 = 731$ (D) · $315 + 533 = 848$ (R) · $204 + 94 = 298$ (U) · $290 + 256 = 546$ (A) · $242 + 311 = 553$ (V) · $409 + 374 = 783$ (S) · $259 + 459 = 718$ (C) · $443 + 337 = 780$ (I) · $521 + 331 = 852$ (N) · $350 + 264 = 614$ (E)

Clue 2 (Subtraction): "THE WITNESS SAW A RIGHT HANDED RIDER"

$908 - 352 = 556$ (T) · $470 - 12 = 458$ (R) · $510 - 377 = 133$ (H) · $553 - 70 = 483$ (E) · $295 - 183 = 112$ (S) · $589 - 262 = 327$ (D) · $775 - 161 = 614$ (I) · $1053 - 318 = 735$ (A) · $737 - 300 = 437$ (W) · $950 - 164 = 786$ (G) · $327 - 2 = 325$ (N)

Clue 3 (Multiplication facts (1-12)): "THE VILLAIN WAS SCARED BY LOUD THUNDER"

$7 \times 1 = 7$ (T) · $6 \times 9 = 54$ (W) · $4 \times 1 = 4$ (R) · $11 \times 2 = 22$ (D) · $3 \times 8 = 24$ (N) · $7 \times 5 = 35$ (I) · $10 \times 5 = 50$ (C) · $7 \times 8 = 56$ (E) · $8 \times 4 = 32$ (U) · $4 \times 11 = 44$ (Y) · $6 \times 7 = 42$ (H) · $7 \times 12 = 84$ (V) · $12 \times 10 = 120$ (L) · $1 \times 11 = 11$ (B) · $6 \times 1 = 6$ (S) · $1 \times 10 = 10$ (O) · $8 \times 8 = 64$ (A)

Clue 4 (Rounding): "A BRAIDED MANE BUN STRAND WAS LEFT BEHIND"

Round 7,640 to the nearest thousand = 8000 (A) · Round 863 to the nearest hundred = 900 (U) · Round 187 to the nearest hundred = 200 (E) · Round 94 to the nearest ten = 90 (F) · Round 839 to the nearest hundred = 800 (S) · Round 626 to the nearest hundred = 600 (N) · Round 1,576 to the nearest thousand = 2000 (L) · Round 6,668 to the nearest thousand = 7000 (M) · Round 37 to the nearest ten = 40 (T) · Round 2,995 to the nearest thousand = 3000 (D) · Round 20 to the nearest ten = 20 (B) · Round 79 to the nearest ten = 80 (W) · Round 34 to the nearest ten = 30 (H) · Round 262 to the nearest hundred = 300 (R) · Round 8,693 to the nearest thousand = 9000 (I)

Clue 5 (Division facts (1-12)): surviving statement is box 9 → Mia White

$24 \div 2 = 12$ · $48 \div 12 = 4$ · $4 \div 4 = 1$ · $10 \div 5 = 2$ · $54 \div 9 = 6$ · $40 \div 8 = 5$ · $36 \div 12 = 3$ · $30 \div 3 = 10$ · $44 \div 4 = 11$ · $63 \div 9 = 7$ · $96 \div 12 = 8$