



Mystery at Lost Fern Island

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

Detective: _____ Date: _____

The golden trophy has been stolen from the Fern Island Camp lodge! Solve the math clues to uncover which explorer took it.

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 jungle bandit is _____

Possible suspects

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

NAME	EXPLORER SKILL	SPECIAL TOOL	DOMINANT HAND	HAIR COLOR	SECRET FEAR
Ranger Noah	Zipline Gliding	Grappling Hook	Right Handed	Sun Blonde Hair	Fear Of Frogs
Guide Grace	Vine Swinging	Binoculars	Right Handed	Bright Red Hair	Fear Of Bats
Navigator Mia	Vine Swinging	Torch Lantern	Right Handed	Bright Red Hair	Fear Of Frogs
Navigator Luke	Zipline Gliding	Decoder Ring	Right Handed	Bright Red Hair	Fear Of Frogs
Ranger Toby	Map Reading	Torch Lantern	Right Handed	Sun Blonde Hair	Fear Of Bees
Hiker Finn	Zipline Gliding	Torch Lantern	Right Handed	Bright Red Hair	Fear Of Frogs
Scout Ella	Map Reading	Grappling Hook	Right Handed	Bright Red Hair	Fear Of Frogs
Ranger Owen	Animal Mimicry	Grappling Hook	Right Handed	Sun Blonde Hair	Fear Of Bees
Explorer Chloe	Vine Swinging	Golden Compass	Right Handed	Bright Red Hair	Fear Of Bees
Pathfinder Eli	Map Reading	Grappling Hook	Right Handed	Sun Blonde Hair	Fear Of Bees
Scout Leo	Zipline Gliding	Binoculars	Left Handed	Bright Red Hair	Fear Of Frogs
Tracker Zoe	Vine Swinging	Binoculars	Left Handed	Dark Black Hair	Fear Of Bees
Adventurer Kai	Animal Mimicry	Torch Lantern	Right Handed	Bright Red Hair	Fear Of Frogs
Hiker Nina	Zipline Gliding	Golden Compass	Right Handed	Dark Black Hair	Fear Of Frogs
Pathfinder Max	Vine Swinging	Decoder Ring	Left Handed	Sun Blonde Hair	Fear Of Frogs
Explorer Ava	River Rafting	Decoder Ring	Left Handed	Dark Black Hair	Fear Of Bees
Captain Bob	River Rafting	Decoder Ring	Right Handed	Dark Black Hair	Fear Of Bats
Tracker Lily	Zipline Gliding	Decoder Ring	Right Handed	Dark Black Hair	Fear Of Frogs
Guide Ruby	Zipline Gliding	Grappling Hook	Right Handed	Sun Blonde Hair	Fear Of Bees
Explorer Maya	River Rafting	Binoculars	Left Handed	Bright Red Hair	Fear Of Bats
Scout Ivy	Animal Mimicry	Binoculars	Left Handed	Sun Blonde Hair	Fear Of Bats

CLUE 1
Addition

Ranger Sam counts all the footprints left near the riverbank to gather our first big clue.

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

T																			
8106	3959	7687	2531	6675	5531	3996	4216	7687	4300	8069	5531	3273	2322	8106	3273	9845	7687	6704	

5531	9845	8106	6675	6704	7687	8069	3996	5192	8069	5428	5428	4216	2322	5531	3996			

3959	9845	9845	2698

$4175 + 3931 = \square \rightarrow \text{T}$

$4366 + 2338 = \square \rightarrow \text{S}$

$1326 + 2633 = \square \rightarrow \text{H}$

$2691 + 1305 = \square \rightarrow \text{G}$

$1888 + 3643 = \square \rightarrow \text{N}$

$2500 + 4175 = \square \rightarrow \text{U}$

$2308 + 1908 = \square \rightarrow \text{L}$

$1533 + 1165 = \square \rightarrow \text{K}$

$2743 + 1557 = \square \rightarrow \text{B}$

$1420 + 1853 = \square \rightarrow \text{D}$

$4117 + 3570 = \square \rightarrow \text{E}$

$1593 + 729 = \square \rightarrow \text{I}$

$3295 + 6550 = \square \rightarrow \text{O}$

$4831 + 3238 = \square \rightarrow \text{A}$

$3148 + 2280 = \square \rightarrow \text{P}$

$1565 + 966 = \square \rightarrow \text{J}$

$3531 + 1661 = \square \rightarrow \text{R}$

Scratch space:

CLUE 2
Rounding

The digital camp scanner rounds the weight of the missing supplies on its screen.

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

T						T						T						
300	70	900	30	20	20	300	9000	90	370	50	300	2300	2300	70	20	230	430	
	T										T							
2300	300	90	20	50	1300	90	370	1300	70	300	70	430	50	290	1300	90	370	9000

Round 286 to the nearest hundred → **T**

Round 1,315 to the nearest hundred → **G**

Round 71 to the nearest ten → **H**

Round 17 to the nearest ten → **O**

Round 430 to the nearest ten → **A**

Round 288 to the nearest ten → **D**

Round 234 to the nearest ten → **W**

Round 944 to the nearest hundred → **E**

Round 30 to the nearest ten → **F**

Round 370 to the nearest ten → **I**

Round 8,566 to the nearest thousand → **P**

Round 94 to the nearest ten → **R**

Round 50 to the nearest ten → **N**

Round 2,297 to the nearest hundred → **S**

Scratch space:

CLUE 3

Subtraction

Maya compares the gear left in the shed to see how many items were taken.

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

T																
3041	4604	8388	2419	1480	6499	6499	8118	1480	3034	6343	8118	3034	8118	6014	8118	3110

6014	4604	8388	3034	8118	6823	6343	5269	8624	6071	6343	5269	8118	8044	8388	8349	

$3864 - 823 = \square \rightarrow \text{**T**}$

$11716 - 3367 = \square \rightarrow \text{**D**}$

$7263 - 440 = \square \rightarrow \text{**F**}$

$10762 - 2374 = \square \rightarrow \text{**E**}$

$6320 - 306 = \square \rightarrow \text{**W**}$

$7021 - 678 = \square \rightarrow \text{**R**}$

$8035 - 3431 = \square \rightarrow \text{**H**}$

$3258 - 148 = \square \rightarrow \text{**Y**}$

$9455 - 1337 = \square \rightarrow \text{**A**}$

$10413 - 1789 = \square \rightarrow \text{**G**}$

$5326 - 57 = \square \rightarrow \text{**O**}$

$4020 - 1601 = \square \rightarrow \text{**V**}$

$6966 - 467 = \square \rightarrow \text{**L**}$

$5479 - 2445 = \square \rightarrow \text{**N**}$

$8570 - 2499 = \square \rightarrow \text{**C**}$

$9810 - 1766 = \square \rightarrow \text{**K**}$

$5545 - 4065 = \square \rightarrow \text{**I**}$

Scratch space:

CLUE 4

Multiplication facts (1-12)

Scout Leo finds equal rows of supply crates hidden behind the thick vines.

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

R						R			R								R	
55	5	88	77	64	108	55	3	2	55	64	32	88	3	11	5	55	5	
84	5	81	2	9	32	2	77	5	21	64	14	2	64	28	84	5		

$5 \times 11 = \square \rightarrow \boxed{\text{R}}$

$7 \times 3 = \square \rightarrow \boxed{\text{M}}$

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

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

$5 \times 1 = \square \rightarrow \boxed{\text{E}}$

$1 \times 3 = \square \rightarrow \boxed{\text{S}}$

$9 \times 1 = \square \rightarrow \boxed{\text{O}}$

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

$4 \times 7 = \square \rightarrow \boxed{\text{B}}$

$9 \times 9 = \square \rightarrow \boxed{\text{F}}$

$8 \times 4 = \square \rightarrow \boxed{\text{N}}$

$11 \times 1 = \square \rightarrow \boxed{\text{W}}$

$11 \times 8 = \square \rightarrow \boxed{\text{D}}$

$7 \times 11 = \square \rightarrow \boxed{\text{H}}$

$7 \times 12 = \square \rightarrow \boxed{\text{L}}$

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

Scratch space:

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

The team splits the ancient coins into equal piles to unlock the final clue safe.

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:

$48 \div 12 = \boxed{}$

$18 \div 2 = \boxed{}$

$120 \div 12 = \boxed{}$

$24 \div 12 = \boxed{}$

$42 \div 7 = \boxed{}$

$12 \div 1 = \boxed{}$

$35 \div 7 = \boxed{}$

$24 \div 3 = \boxed{}$

$5 \div 5 = \boxed{}$

$70 \div 10 = \boxed{}$

$27 \div 9 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain mimicked a wild jungle parrot, then guided the path with a golden compass.
2. The villain swung across the gorge on vines, then unlocked the chest with a decoder ring.
3. The villain swung across the gorge on vines, then spotted the campsite using binoculars.
4. The villain mimicked a wild jungle parrot, then lit up the trail with a torch lantern.
5. The villain mimicked a wild jungle parrot, then spotted the campsite using binoculars.
6. The villain glided down the zipline, then scaled the canyon with a grappling hook.
7. The villain decoded the secret island map, then scaled the canyon with a grappling hook.
8. The villain paddled down the rapid river, then guided the path with a golden compass.
9. The villain swung across the gorge on vines, then lit up the trail with a torch lantern.
10. The villain glided down the zipline, then unlocked the chest with a decoder ring.
11. The villain glided down the zipline, then lit up the trail with a torch lantern.
12. The villain paddled down the rapid river, then lit up the trail with a torch lantern.

Answer Key

Mystery at Lost Fern Island

Culprit: Hiker Finn

Zipline Gliding · Torch Lantern · Right Handed · Bright Red Hair · Fear Of Frogs

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

Clue 1 (Addition): "THE JUNGLE BANDIT DOES NOT USE A GRAPPLING HOOK"

$4175 + 3931 = 8106$ (T) · $4366 + 2338 = 6704$ (S) · $1326 + 2633 = 3959$ (H) · $2691 + 1305 = 3996$ (G) · $1888 + 3643 = 5531$ (N) · $2500 + 4175 = 6675$ (U) · $2308 + 1908 = 4216$ (L) · $1533 + 1165 = 2698$ (K) · $2743 + 1557 = 4300$ (B) · $1420 + 1853 = 3273$ (D) · $4117 + 3570 = 7687$ (E) · $1593 + 729 = 2322$ (I) · $3295 + 6550 = 9845$ (O) · $4831 + 3238 = 8069$ (A) · $3148 + 2280 = 5428$ (P) · $1565 + 966 = 2531$ (J) · $3531 + 1661 = 5192$ (R)

Clue 2 (Rounding): "THE FOOTPRINTS SHOW A STRONG RIGHT HAND GRIP"

Round 286 to the nearest hundred = 300 (T) · Round 1,315 to the nearest hundred = 1300 (G) · Round 71 to the nearest ten = 70 (H) · Round 17 to the nearest ten = 20 (O) · Round 430 to the nearest ten = 430 (A) · Round 288 to the nearest ten = 290 (D) · Round 234 to the nearest ten = 230 (W) · Round 944 to the nearest hundred = 900 (E) · Round 30 to the nearest ten = 30 (F) · Round 370 to the nearest ten = 370 (I) · Round 8,566 to the nearest thousand = 9000 (P) · Round 94 to the nearest ten = 90 (R) · Round 50 to the nearest ten = 50 (N) · Round 2,297 to the nearest hundred = 2300 (S)

Clue 3 (Subtraction): "THE VILLAIN RAN AWAY WHEN A FROG CROAKED"

$3864 - 823 = 3041$ (T) · $11716 - 3367 = 8349$ (D) · $7263 - 440 = 6823$ (F) · $10762 - 2374 = 8388$ (E) · $6320 - 306 = 6014$ (W) · $7021 - 678 = 6343$ (R) · $8035 - 3431 = 4604$ (H) · $3258 - 148 = 3110$ (Y) · $9455 - 1337 = 8118$ (A) · $10413 - 1789 = 8624$ (G) · $5326 - 57 = 5269$ (O) · $4020 - 1601 = 2419$ (V) · $6966 - 467 = 6499$ (L) · $5479 - 2445 = 3034$ (N) · $8570 - 2499 = 6071$ (C) · $9810 - 1766 = 8044$ (K) · $5545 - 4065 = 1480$ (I)

Clue 4 (Multiplication facts (1-12)): "RED HAIR STRANDS WERE LEFT ON THE MAP TABLE"

$5 \times 11 = 55$ (R) · $7 \times 3 = 21$ (M) · $8 \times 8 = 64$ (A) · $2 \times 7 = 14$ (P) · $5 \times 1 = 5$ (E) · $1 \times 3 = 3$ (S) · $9 \times 1 = 9$ (O) · $1 \times 2 = 2$ (T) · $4 \times 7 = 28$ (B) · $9 \times 9 = 81$ (F) · $8 \times 4 = 32$ (N) · $11 \times 1 = 11$ (W) · $11 \times 8 = 88$ (D) · $7 \times 11 = 77$ (H) · $7 \times 12 = 84$ (L) · $9 \times 12 = 108$ (I)

Clue 5 (Division facts (1-12)): surviving statement is box 11 → Hiker Finn

$48 \div 12 = 4$ · $18 \div 2 = 9$ · $120 \div 12 = 10$ · $24 \div 12 = 2$ · $42 \div 7 = 6$ · $12 \div 1 = 12$ · $35 \div 7 = 5$ · $24 \div 3 = 8$ · $5 \div 5 = 1$ · $70 \div 10 = 7$ · $27 \div 9 = 3$