The Mystery of Lost Timber Ridge

Grade 6 math · Addition, Subtraction, Multi-step word problems, Percentages, Missing addends · Reading level grades 3-4

Detective: _____ **Date:** _____

Someone swiped the golden camp trophy right before the final campfire! The Junior Explorers are on the case to track down the sneaky bandit.

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 Camp Mischief Maker is _____

Possible suspects

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

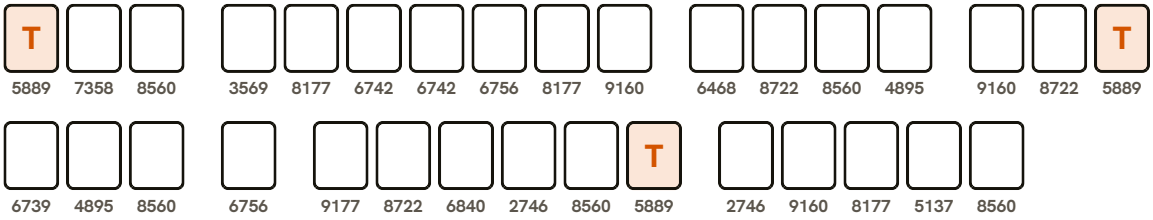
NAME	PRIMARY GEAR	SPECIAL TOOL	DOMINANT HAND	HEADWEAR	CAMP WEAKNESS
Toby Trail	Grappling Hook	Code Breaker	Left Handed	Silver Helmet	Sticky Honey
Clara Canyon	Signal Flare	Night Vision	Left Handed	Red Bandana	Sticky Honey
Felix Fern	Smoke Bomb	Laser Pen	Left Handed	Red Bandana	Loud Whistle
Hazel Hike	Grappling Hook	Laser Pen	Left Handed	Red Bandana	Sticky Honey
Milo Meadow	Grappling Hook	Code Breaker	Left Handed	Silver Helmet	Bright Flashlight
Sienna Summit	Grappling Hook	Night Vision	Left Handed	Silver Helmet	Sticky Honey
Ruby River	Glider Pack	Night Vision	Right Handed	Silver Helmet	Sticky Honey
Riley Ridge	Grappling Hook	Code Breaker	Right Handed	Silver Helmet	Sticky Honey
Willa Wild	Smoke Bomb	Laser Pen	Left Handed	Silver Helmet	Bright Flashlight
Victor Valley	Glider Pack	Night Vision	Right Handed	Spiky Blue Cap	Bright Flashlight
Quinn Quartz	Map Compass	Pocket Knife	Left Handed	Silver Helmet	Sticky Honey
Sammy Swift	Smoke Bomb	Laser Pen	Left Handed	Silver Helmet	Sticky Honey
Maya Mountain	Signal Flare	Code Breaker	Right Handed	Spiky Blue Cap	Bright Flashlight
Penny Pine	Map Compass	Night Vision	Right Handed	Spiky Blue Cap	Sticky Honey
Oscar Oak	Map Compass	Code Breaker	Left Handed	Silver Helmet	Sticky Honey
Piper Peak	Map Compass	Laser Pen	Left Handed	Red Bandana	Loud Whistle
Jasper Junction	Signal Flare	Night Vision	Right Handed	Spiky Blue Cap	Loud Whistle
Tessa Tree	Glider Pack	Laser Pen	Left Handed	Silver Helmet	Loud Whistle
Scout Sterling	Grappling Hook	Paracord Rope	Left Handed	Spiky Blue Cap	Sticky Honey
Ivy Timber	Signal Flare	Code Breaker	Right Handed	Silver Helmet	Loud Whistle
Zoe Zephyr	Signal Flare	Paracord Rope	Left Handed	Red Bandana	Bright Flashlight

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CLUE 1 Addition

Ranger Robin totals up all the muddy boot prints found near the main cabin.

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



2970 + 2919 = ☐ → T	1166 + 2403 = ☐ → V	3341 + 1796 = ☐ → F
2449 + 4290 = ☐ → U	1757 + 989 = ☐ → K	2701 + 4041 = ☐ → L
2575 + 3893 = ☐ → D	4836 + 2522 = ☐ → H	3022 + 1873 = ☐ → S
3427 + 3413 = ☐ → C	4248 + 4474 = ☐ → O	4683 + 2073 = ☐ → A
3535 + 5642 = ☐ → P	4861 + 4299 = ☐ → N	4408 + 3769 = ☐ → I
3997 + 4563 = ☐ → E		

Scratch space:

CLUE 2 Subtraction

You calculate how many camp supplies were left behind in the gear shed.

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



8316 - 4588 = ☐ → T

7139 - 4519 = ☐ → A

8954 - 4549 = ☐ → H

11105 - 4341 = ☐ → I

6336 - 4698 = ☐ → C

8635 - 2621 = ☐ → P

9847 - 3882 = ☐ → F

6338 - 2749 = ☐ → R

4187 - 3137 = ☐ → N

7105 - 1892 = ☐ → D

6870 - 4272 = ☐ → U

9078 - 1901 = ☐ → S

5926 - 3766 = ☐ → E

5489 - 2947 = ☐ → W

4219 - 210 = ☐ → O

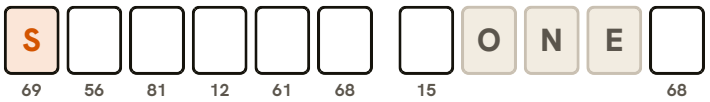
4830 - 3517 = ☐ → L

Scratch space:

CLUE 3 Multi-step word problems

The team plans out the combined distance across three different hiking routes.

Solve each problem, then write its letter in the boxes to fill in the missing word.

Someone scared the villain off with 

.

Ranger Robin filled 7 boxes with 3 trail maps each, then found 48 more trail maps. How many trail maps are there in all?

Answer: ☐ → **S**

There were 55 trail maps in all. 31 trail maps were set aside. The rest were shared equally among 2 Junior Explorers. How many trail maps did each get?

Answer: ☐ → **C**

There were 291 compasses in all. 19 compasses were set aside. The rest were shared equally among 4 Junior Explorers. How many compasses did each get?

Answer: ☐ → **Y**

There were 356 climbing carabiners in all. 4 Junior Explorers used 19 climbing carabiners each. The other 5 Junior Explorers shared the rest equally. How many climbing carabiners did each of the other Junior Explorers get?

Answer: ☐ → **T**

Ranger Robin collected 71 energy bars in the morning and 4 energy bars in the afternoon, then split them equally among 5 Junior Explorers. How many energy bars did each get?

Answer: ☐ → **H**

Ranger Robin earned 2 canteen cups in each of 3 rounds, plus 82 bonus canteen cups. Then 7 canteen cups were lost. How many canteen cups are left?

Answer: ☐ → **I**

Ranger Robin filled 4 boxes with 7 canteen cups each, then found 33 more canteen cups. How many canteen cups are there in all?

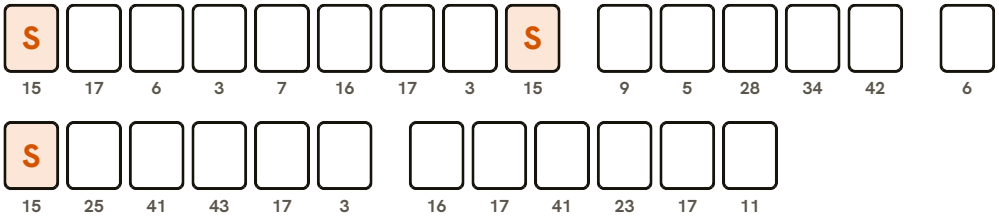
Answer: ☐ → **K**

Scratch space:

CLUE 4 Percentages

A solar radio device shows what percentage of power remains in the battery.

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



20% of 75 = ☐ → S

10% of 60 = ☐ → A

20% of 25 = ☐ → O

5% of 680 = ☐ → N

25% of 100 = ☐ → I

75% of 56 = ☐ → D

60% of 15 = ☐ → F

25% of 44 = ☐ → T

50% of 56 = ☐ → U

5% of 460 = ☐ → M

5% of 340 = ☐ → E

25% of 12 = ☐ → R

20% of 35 = ☐ → C

10% of 410 = ☐ → L

5% of 860 = ☐ → V

50% of 32 = ☐ → H

Scratch space:

CLUE 5 Missing addends - the last clue

You figure out how many extra canteen cups are needed to balance the pack.

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:

26 + ___ = 36 ☐	36 + ___ = 44 ☐	24 + ___ = 25 ☐	23 + ___ = 28 ☐
24 + ___ = 26 ☐	19 + ___ = 25 ☐	37 + ___ = 48 ☐	34 + ___ = 46 ☐
3 + ___ = 12 ☐	25 + ___ = 32 ☐	18 + ___ = 22 ☐	

Step 2 - cross out the sentence with each answer:

1. The villain checks coordinates on a map compass, then opens the lock with a code breaker.
2. The villain checks coordinates on a map compass, then swings across the gap on paracord rope.
3. The villain zips away with a grappling hook, then opens the lock with a code breaker.
4. The villain vanishes behind a smoke bomb, then opens the lock with a code breaker.
5. The villain vanishes behind a smoke bomb, then swings across the gap on paracord rope.
6. The villain checks coordinates on a map compass, then cuts the net using a laser pen.
7. The villain fires off a bright signal flare, then opens the lock with a code breaker.
8. The villain vanishes behind a smoke bomb, then cuts the net using a laser pen.
9. The villain soars over trees in a glider pack, then opens the lock with a code breaker.
10. The villain zips away with a grappling hook, then scans the brush with night vision.
11. The villain soars over trees in a glider pack, then whittles a path with a pocket knife.
12. The villain fires off a bright signal flare, then cuts the net using a laser pen.

TEACHER / PARENT

Answer Key

The Mystery of Lost Timber Ridge

Culprit: Toby Trail

Grappling Hook · Code Breaker · Left Handed · Silver Helmet · Sticky Honey

Trail: Start 21 → Clue 1 20 → Clue 2 13 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT USE A POCKET KNIFE"

2970 + 2919 = 5889 (T) · 1166 + 2403 = 3569 (V) · 3341 + 1796 = 5137 (F) · 2449 + 4290 = 6739 (U) · 1757 + 989 = 2746 (K) · 2701 + 4041 = 6742 (L) · 2575 + 3893 = 6468 (D) · 4836 + 2522 = 7358 (H) · 3022 + 1873 = 4895 (S) · 3427 + 3413 = 6840 (C) · 4248 + 4474 = 8722 (O) · 4683 + 2073 = 6756 (A) · 3535 + 5642 = 9177 (P) · 4861 + 4299 = 9160 (N) · 4408 + 3769 = 8177 (I) · 3997 + 4563 = 8560 (E)

Clue 2 (Subtraction): "THE FOOTPRINTS SHOW A LEFT HANDED SCOUT"

8316 - 4588 = 3728 (T) · 7139 - 4519 = 2620 (A) · 8954 - 4549 = 4405 (H) · 11105 - 4341 = 6764 (I) · 6336 - 4698 = 1638 (C) · 8635 - 2621 = 6014 (P) · 9847 - 3882 = 5965 (F) · 6338 - 2749 = 3589 (R) · 4187 - 3137 = 1050 (N) · 7105 - 1892 = 5213 (D) · 6870 - 4272 = 2598 (U) · 9078 - 1901 = 7177 (S) · 5926 - 3766 = 2160 (E) · 5489 - 2947 = 2542 (W) · 4219 - 210 = 4009 (O) · 4830 - 3517 = 1313 (L)

Clue 3 (Multi-step word problems): "STICKY HONEY"

Ranger Robin filled 7 boxes with 3 trail maps each, then found 48 more trail maps. How many trail maps are there in all? = 69 (S) · There were 55 trail maps in all. 31 trail maps were set aside. The rest were shared equally among 2 Junior Explorers. How many trail maps did each get? = 12 (C) · There were 291 compasses in all. 19 compasses were set aside. The rest were shared equally among 4 Junior Explorers. How many compasses did each get? = 68 (Y) · There were 356 climbing carabiners in all. 4 Junior Explorers used 19 climbing carabiners each. The other 5 Junior Explorers shared the rest equally. How many climbing carabiners did each of the other Junior Explorers get? = 56 (T) · Ranger Robin collected 71 energy bars in the morning and 4 energy bars in the afternoon, then split them equally among 5 Junior Explorers. How many energy bars did each get? = 15 (H) · Ranger Robin earned 2 canteen cups in each of 3 rounds, plus 82 bonus canteen cups. Then 7 canteen cups were lost. How many canteen cups are left? = 81 (I) · Ranger Robin filled 4 boxes with 7 canteen cups each, then found 33 more canteen cups. How many canteen cups are there in all? = 61 (K)

Clue 4 (Percentages): "SEARCHERS FOUND A SILVER HELMET"

20% of 75 = 15 (S) · 10% of 60 = 6 (A) · 20% of 25 = 5 (O) · 5% of 680 = 34 (N) · 25% of 100 = 25 (I) · 75% of 56 = 42 (D) · 60% of 15 = 9 (F) · 25% of 44 = 11 (T) · 50% of 56 = 28 (U) · 5% of 460 = 23 (M) · 5% of 340 = 17 (E) · 25% of 12 = 3 (R) · 20% of 35 = 7 (C) · 10% of 410 = 41 (L) · 5% of 860 = 43 (V) · 50% of 32 = 16 (H)

Clue 5 (Missing addends): surviving statement is box 3 → Toby Trail

26 + ___ = 36 = 10 · 36 + ___ = 44 = 8 · 24 + ___ = 25 = 1 · 23 + ___ = 28 = 5 · 24 + ___ = 26 = 2 · 19 + ___ = 25 = 6 · 37 + ___ = 48 = 11 · 34 + ___ = 46 = 12 · 3 + ___ = 12 = 9 · 25 + ___ = 32 = 7 · 18 + ___ = 22 = 4