The Great Treehouse Map Caper

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

Detective: _____ **Date:** _____

Someone snuck into the high treehouse headquarters and snatched the secret jungle treasure map! Solve the math clues to discover who stole the map and saved their getaway.

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 Map Thief is _____

Possible suspects

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

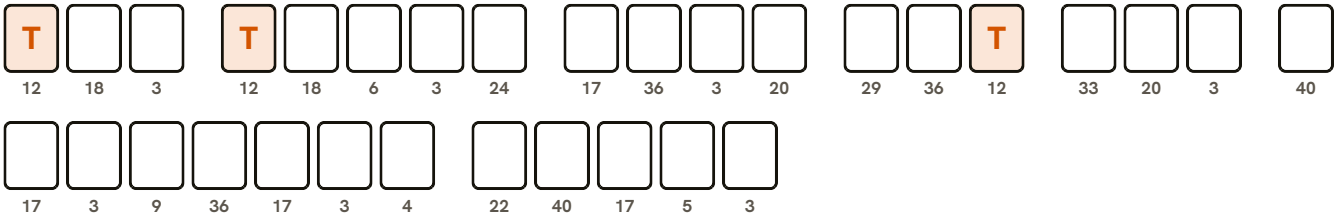
NAME	EXPLORATION TOOL	JUNGLE GADGET	STRAP BUCKLE	HAT TYPE	DISTRACTION ITEM
Scout Sally	Glider Cape	Decoder Badge	Right Buckle	Leather Cap	Squeaky Frog
Navigator Nora	Vine Launcher	Pocket Flare	Right Buckle	Pith Helmet	Bright Mirror
Hunter Hannah	Vine Launcher	Whistle Key	Left Buckle	Canvas Visor	Squeaky Frog
Hunter Owen	Grappling Hook	Decoder Badge	Left Buckle	Canvas Visor	Squeaky Frog
Explorer Leo	Sun Telescope	Flashlight Watch	Right Buckle	Canvas Visor	Squeaky Frog
Scout Ben	Sun Telescope	Pith Helmet Cam	Left Buckle	Canvas Visor	Squeaky Frog
Ranger Ricky	Sun Telescope	Decoder Badge	Left Buckle	Pith Helmet	Bright Mirror
Trailblazer Lily	Grappling Hook	Whistle Key	Left Buckle	Canvas Visor	Squeaky Frog
Captain Carl	Vine Launcher	Flashlight Watch	Left Buckle	Pith Helmet	Squeaky Frog
Explorer Emma	Vine Launcher	Whistle Key	Right Buckle	Leather Cap	Smokey Berry
Tracker Tim	Vine Launcher	Pocket Flare	Left Buckle	Pith Helmet	Squeaky Frog
Ranger Oscar	Vine Launcher	Pocket Flare	Right Buckle	Leather Cap	Smokey Berry
Captain Ruby	Sun Telescope	Flashlight Watch	Right Buckle	Leather Cap	Bright Mirror
Rover Mia	Vine Launcher	Pocket Flare	Right Buckle	Leather Cap	Bright Mirror
Tracker Chloe	Sun Telescope	Flashlight Watch	Left Buckle	Pith Helmet	Smokey Berry
Guide Maya	Vine Launcher	Pocket Flare	Left Buckle	Pith Helmet	Bright Mirror
Navigator Zoe	Sun Telescope	Pith Helmet Cam	Right Buckle	Pith Helmet	Squeaky Frog
Pioneer Penny	Sun Telescope	Pith Helmet Cam	Left Buckle	Leather Cap	Squeaky Frog
Guide Greta	Glider Cape	Pocket Flare	Left Buckle	Pith Helmet	Squeaky Frog
Trailblazer Toby	Grappling Hook	Whistle Key	Left Buckle	Pith Helmet	Squeaky Frog
Pathfinder Sam	Grappling Hook	Decoder Badge	Left Buckle	Pith Helmet	Squeaky Frog

make your own at mathcrackers.com

CLUE 1 Fractions of a number

Ranger Sam found a trail of jungle berries leading away from the map chest.

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



1/2 of 24 = ☐ → T

1/5 of 20 = ☐ → R

2/3 of 54 = ☐ → O

4/6 of 60 = ☐ → A

1/2 of 34 = ☐ → D

3/10 of 110 = ☐ → U

2/10 of 110 = ☐ → B

2/8 of 72 = ☐ → H

4/8 of 18 = ☐ → C

8/10 of 25 = ☐ → S

1/3 of 72 = ☐ → F

2/6 of 87 = ☐ → N

6/8 of 8 = ☐ → I

1/3 of 9 = ☐ → E

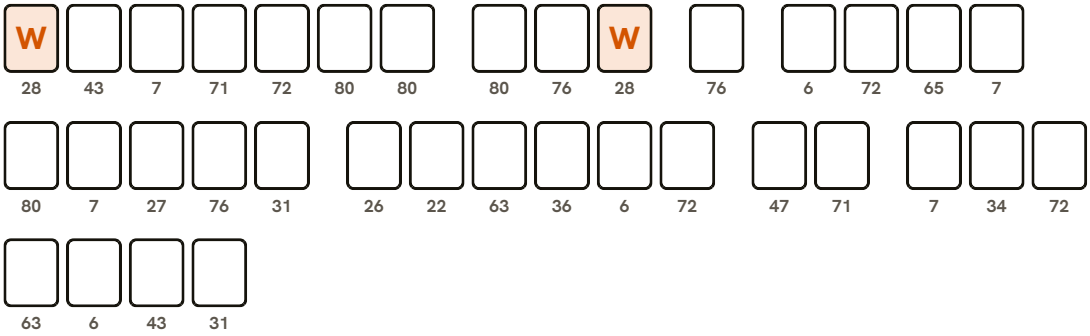
2/4 of 10 = ☐ → G

Scratch space:

CLUE 2 Order of operations

To unlock the treehouse safety latch, the scouts solved a multi step gear code.

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



10 × 4 - 12 = ☐ → W

6 + 2 × 8 = ☐ → U

10 × 10 - 24 = ☐ → A

14 + 4 × 5 = ☐ → H

9 × 11 - 27 = ☐ → E

9 × 5 - 2 = ☐ → I

9 × 12 - 28 = ☐ → S

12 × 7 - 13 = ☐ → N

1 + 2 × 3 = ☐ → T

17 + 7 × 2 = ☐ → P

29 + 4 × 9 = ☐ → F

11 × 4 - 8 = ☐ → K

9 + 2 × 9 = ☐ → R

23 + 3 × 8 = ☐ → O

4 × 7 - 22 = ☐ → L

28 + 5 × 7 = ☐ → C

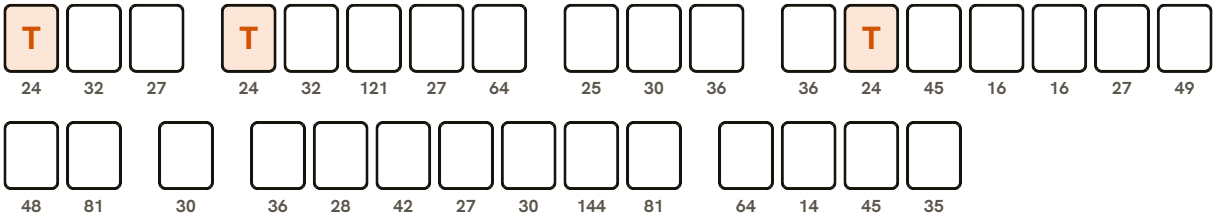
10 × 3 - 4 = ☐ → B

Scratch space:

CLUE 3 Multiplication facts (1-12)

> The explorers counted equal rows of supply crates left in the canopy shelter.

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



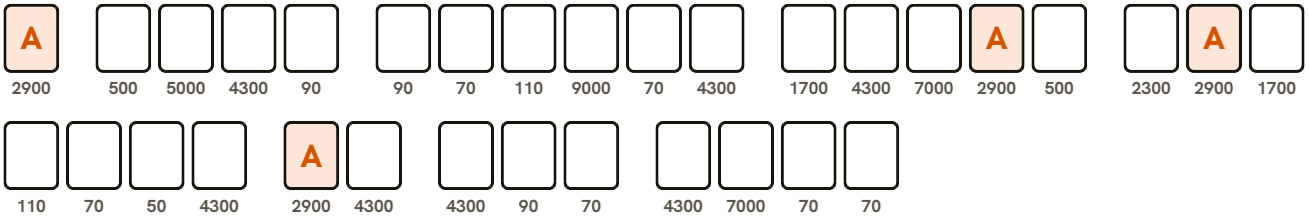
8 × 3 = ☐ → T	4 × 7 = ☐ → Q	7 × 5 = ☐ → G	5 × 5 = ☐ → W
3 × 9 = ☐ → E	6 × 5 = ☐ → A	6 × 7 = ☐ → U	6 × 8 = ☐ → B
8 × 8 = ☐ → F	9 × 9 = ☐ → Y	11 × 11 = ☐ → I	
4 × 4 = ☐ → P	4 × 8 = ☐ → H	4 × 9 = ☐ → S	2 × 7 = ☐ → R
7 × 7 = ☐ → D	12 × 12 = ☐ → K	9 × 5 = ☐ → O	

Scratch space:

CLUE 4 Rounding

The treehouse radar screen only displays blurred distance numbers rounded to the nearest ten.

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



Round 2,936 to the nearest hundred ☐ → **A**

Round 94 to the nearest ten ☐ → **H**

Round 69 to the nearest ten ☐ → **E**

Round 4,296 to the nearest hundred ☐ → **T**

Round 52 to the nearest ten ☐ → **F**

Round 1,737 to the nearest hundred ☐ → **S**

Round 2,253 to the nearest hundred ☐ → **W**

Round 8,748 to the nearest thousand ☐ → **M**

Round 114 to the nearest ten ☐ → **L**

Round 6,759 to the nearest thousand ☐ → **R**

Round 5,393 to the nearest thousand ☐ → **I**

Round 489 to the nearest hundred ☐ → **P**

Scratch space:

CLUE 5 Fractions of a number - the last clue

Detective Maya checked the fruit rations left in the camp kitchen to find another 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:

2/8 of 20 = ☐	6/10 of 20 = ☐	4/6 of 3 = ☐	1/5 of 5 = ☐
1/6 of 18 = ☐	1/5 of 20 = ☐	1/10 of 70 = ☐	1/2 of 20 = ☐
1/10 of 80 = ☐	1/2 of 22 = ☐	3/4 of 12 = ☐	

Step 2 - cross out the sentence with each answer:

1. The villain zipped up the vine ladder, then snapped a photo of the ruins.
2. The villain zipped up the vine ladder, then lit up the dim hollow tree.
3. The villain zipped up the vine ladder, then decoded the carved secret emblem.
4. The villain scouted through the lenses, then snapped a photo of the ruins.
5. The villain zipped up the vine ladder, then marked the trail with a signal.
6. The villain soared down from the canopy, then marked the trail with a signal.
7. The villain swung across the rope bridge, then decoded the carved secret emblem.
8. The villain soared down from the canopy, then unlocked the wooden supply chest.
9. The villain soared down from the canopy, then decoded the carved secret emblem.
10. The villain scouted through the lenses, then decoded the carved secret emblem.
11. The villain zipped up the vine ladder, then unlocked the wooden supply chest.
12. The villain swung across the rope bridge, then unlocked the wooden supply chest.

TEACHER / PARENT

Answer Key

The Great Treehouse Map Caper

Culprit: Guide Greta

Glider Cape · Pocket Flare · Left Buckle · Pith Helmet · Squeaky Frog

Trail: Start 21 → Clue 1 17 → Clue 2 10 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Fractions of a number): "THE THIEF DOES NOT USE A DECODER BADGE"

1/2 of 24 = 12 (T) · 1/5 of 20 = 4 (R) · 2/3 of 54 = 36 (O) · 4/6 of 60 = 40 (A) · 1/2 of 34 = 17 (D) · 3/10 of 110 = 33 (U) · 2/10 of 110 = 22 (B) · 2/8 of 72 = 18 (H) · 4/8 of 18 = 9 (C) · 8/10 of 25 = 20 (S) · 1/3 of 72 = 24 (F) · 2/6 of 87 = 29 (N) · 6/8 of 8 = 6 (I) · 1/3 of 9 = 3 (E) · 2/4 of 10 = 5 (G)

Clue 2 (Order of operations): "WITNESS SAW A LEFT STRAP BUCKLE ON THE CLIP"

10 × 4 - 12 = 28 (W) · 6 + 2 × 8 = 22 (U) · 10 × 10 - 24 = 76 (A) · 14 + 4 × 5 = 34 (H) · 9 × 11 - 27 = 72 (E) · 9 × 5 - 2 = 43 (I) · 9 × 12 - 28 = 80 (S) · 12 × 7 - 13 = 71 (N) · 1 + 2 × 3 = 7 (T) · 17 + 7 × 2 = 31 (P) · 29 + 4 × 9 = 65 (F) · 11 × 4 - 8 = 36 (K) · 9 + 2 × 9 = 27 (R) · 23 + 3 × 8 = 47 (O) · 4 × 7 - 22 = 6 (L) · 28 + 5 × 7 = 63 (C) · 10 × 3 - 4 = 26 (B)

Clue 3 (Multiplication facts (1-12)): "THE THIEF WAS STOPPED BY A SQUEAKY FROG"

8 × 3 = 24 (T) · 4 × 7 = 28 (Q) · 7 × 5 = 35 (G) · 5 × 5 = 25 (W) · 3 × 9 = 27 (E) · 6 × 5 = 30 (A) · 6 × 7 = 42 (U) · 6 × 8 = 48 (B) · 8 × 8 = 64 (F) · 9 × 9 = 81 (Y) · 11 × 11 = 121 (I) · 4 × 4 = 16 (P) · 4 × 8 = 32 (H) · 4 × 9 = 36 (S) · 2 × 7 = 14 (R) · 7 × 7 = 49 (D) · 12 × 12 = 144 (K) · 9 × 5 = 45 (O)

Clue 4 (Rounding): "A PITH HELMET STRAP WAS LEFT AT THE TREE"

Round 2,936 to the nearest hundred = 2900 (A) · Round 94 to the nearest ten = 90 (H) · Round 69 to the nearest ten = 70 (E) · Round 4,296 to the nearest hundred = 4300 (T) · Round 52 to the nearest ten = 50 (F) · Round 1,737 to the nearest hundred = 1700 (S) · Round 2,253 to the nearest hundred = 2300 (W) · Round 8,748 to the nearest thousand = 9000 (M) · Round 114 to the nearest ten = 110 (L) · Round 6,759 to the nearest thousand = 7000 (R) · Round 5,393 to the nearest thousand = 5000 (I) · Round 489 to the nearest hundred = 500 (P)

Clue 5 (Fractions of a number): surviving statement is box 6 → Guide Greta

2/8 of 20 = 5 · 6/10 of 20 = 12 · 4/6 of 3 = 2 · 1/5 of 5 = 1 · 1/6 of 18 = 3 · 1/5 of 20 = 4 · 1/10 of 70 = 7 · 1/2 of 20 = 10 · 1/10 of 80 = 8 · 1/2 of 22 = 11 · 3/4 of 12 = 9