



The Secret Agent Treehouse Mystery

Grade 7 math · Addition, Subtraction, Multiplication, Integers, Division · Reading level grades 1-2

Detective: _____ Date: _____

Welcome to the Agent Treehouse. Someone took the Golden Binoculars! The Head Trainer needs your help to find the rogue agent. Look for clues to solve this mystery. Use your spy math to find the target. Good luck, agent!

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 rogue agent is _____

Possible suspects

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

NAME	GADGET	SKILL	WRITING HAND	HAIR COLOR	FAVORITE SNACK
Leo	Grappling Hook	Safe Cracking	Right-handed	Blonde Hair	Cookie
Ben	Laser Pen	Safe Cracking	Right-handed	Brown Hair	Cookie
Ava	Night Goggles	Zip Lining	Right-handed	Brown Hair	Apple
Eli	Grappling Hook	Zip Lining	Left-handed	Brown Hair	Apple
Max	Grappling Hook	Safe Cracking	Left-handed	Red Hair	Cookie
Rose	Night Goggles	Zip Lining	Right-handed	Red Hair	Cookie
Eva	Laser Pen	Safe Cracking	Left-handed	Red Hair	Popcorn
Roy	Jet Shoes	Stealth Walking	Left-handed	Red Hair	Apple
Tim	Laser Pen	Code Breaking	Right-handed	Blonde Hair	Apple
Dan	Grappling Hook	Safe Cracking	Right-handed	Red Hair	Cookie
Ned	Spy Camera	Stealth Walking	Left-handed	Red Hair	Popcorn
Meg	Laser Pen	Stealth Walking	Left-handed	Red Hair	Apple
Joy	Spy Camera	Code Breaking	Left-handed	Blonde Hair	Apple
Will	Grappling Hook	Tree Climbing	Right-handed	Brown Hair	Apple
Jax	Laser Pen	Stealth Walking	Left-handed	Brown Hair	Popcorn
Tess	Jet Shoes	Safe Cracking	Right-handed	Red Hair	Cookie
Zoe	Night Goggles	Code Breaking	Right-handed	Red Hair	Cookie
Sam	Laser Pen	Zip Lining	Right-handed	Red Hair	Popcorn
Gus	Spy Camera	Safe Cracking	Left-handed	Blonde Hair	Popcorn
Mia	Laser Pen	Tree Climbing	Left-handed	Blonde Hair	Cookie
Amy	Night Goggles	Tree Climbing	Right-handed	Red Hair	Cookie

CLUE 1 Addition

We need to count our spy gadgets. Add the new walkie talkies to find the total.

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

T																T
4941	7971	2273	5613	5596	5348	5348	3007	5596	6378	5367	6010	2273	7138	6378	6010	4941
9726	7138	2273	4549	6010	5367	2273	8461	6561	2273	3007	7448	5596	6378	3993		

$$2304 + 2637 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$1402 + 2591 = \boxed{} \rightarrow \boxed{\text{G}}$$

$$3764 + 1849 = \boxed{} \rightarrow \boxed{\mathbf{V}}$$

$$2376 + 2972 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$2604 + 2992 = \boxed{} \rightarrow \boxed{}$$

$1696 + 2853 = \boxed{} \rightarrow \boxed{\text{C}}$

$$3462 + 4999 = \boxed{} \rightarrow \boxed{\text{B}}$$

$$1185 + 1822 = \boxed{} \rightarrow \boxed{\text{A}}$$

$$2263 + 3747 = \boxed{} \rightarrow \boxed{0}$$

$$2884 + 3494 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$5523 + 2448 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$4144 + 5582 = \boxed{} \rightarrow \boxed{\mathbf{U}}$$

$$1198 + 1075 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$2671 + 4467 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$3807 + 2754 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$3684 + 3764 = \boxed{} \rightarrow \boxed{\text{K}}$$

$$2670 + 2697 = \boxed{} \rightarrow \boxed{\text{D}}$$

Scratch space:

Subtraction

Some map pieces are missing. Subtract the lost pieces from the map pile.

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

Diagram illustrating a sequence of boxes (representing nodes or states) arranged in two rows. The boxes are labeled with numbers below them. Some boxes are shaded orange and contain the letter 'T', indicating a specific state or value.

Top Row (15 boxes):

- Box 1: Orange, contains 'T' (Label: 7215)
- Box 2: White (Label: 2102)
- Box 3: White (Label: 6057)
- Box 4: White (Label: 3942)
- Box 5: White (Label: 8300)
- Box 6: White (Label: 8067)
- Box 7: White (Label: 5347)
- Box 8: White (Label: 6057)
- Box 9: White (Label: 8913)
- Box 10: White (Label: 8067)
- Box 11: White (Label: 6057)
- Box 12: White (Label: 2393)
- Box 13: Orange, contains 'T' (Label: 7215)
- Box 14: White (Label: 6649)
- Box 15: White (Label: 3942)
- Box 16: White (Label: 3095)
- Box 17: Orange, contains 'T' (Label: 7215)
- Box 18: White (Label: 6057)
- Box 19: White (Label: 3768)

Bottom Row (12 boxes):

- Box 1: White (Label: 6649)
- Box 2: White (Label: 3095)
- Box 3: Orange, contains 'T' (Label: 7215)
- Box 4: White (Label: 2102)
- Box 5: Orange, contains 'T' (Label: 7215)
- Box 6: White (Label: 2102)
- Box 7: White (Label: 6057)
- Box 8: White (Label: 3942)
- Box 9: White (Label: 3095)
- Box 10: White (Label: 8067)
- Box 11: White (Label: 2102)
- Box 12: Orange, contains 'T' (Label: 7215)
- Box 13: White (Label: 2102)
- Box 14: White (Label: 8913)
- Box 15: White (Label: 2393)
- Box 16: White (Label: 8963)

$9958 - 2743 = \boxed{} \rightarrow \mathbf{T}$

$9638 - 675 = \boxed{} \rightarrow \mathbf{D}$

$$6996 - 4894 = \boxed{} \rightarrow \boxed{\text{H}}$$

$10624 - 4567 = \boxed{} \rightarrow \boxed{\text{E}}$

$$5543 - 1775 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$8507 - 4565 = \boxed{} \rightarrow \boxed{\text{R}}$$

$11144 - 3077 = \boxed{} \rightarrow \boxed{\mathbf{G}}$

$$3034 - 641 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$6705 - 56 = \boxed{} \rightarrow \boxed{\text{W}}$$

$$5813 - 466 = \boxed{} \rightarrow \boxed{\text{U}}$$

$13096 - 4183 = \boxed{} \rightarrow \boxed{\text{A}}$

$6389 - 3294 = \boxed{} \rightarrow \boxed{}$

$$12670 - 4370 = \boxed{} \rightarrow \boxed{0}$$

Scratch space:

CLUE 3

Multiplication facts (1-12)

We have boxes of spy gear. Multiply the rows of boxes to count them all.

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

T																			
72	120	81	77	16	45	144	81	108	45	81	27	72	132	72	16	32	32	81	60

T												
72	16	81	108	72	108	48	16	16	50	80	81	

$8 \times 9 = \square \rightarrow \boxed{\text{T}}$

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

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

$8 \times 2 = \square \rightarrow \boxed{\text{O}}$

$10 \times 12 = \square \rightarrow \boxed{\text{H}}$

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

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

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

$4 \times 12 = \square \rightarrow \boxed{\text{C}}$

$9 \times 5 = \square \rightarrow \boxed{\text{G}}$

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

$10 \times 5 = \square \rightarrow \boxed{\text{K}}$

$10 \times 8 = \square \rightarrow \boxed{\text{I}}$

$9 \times 3 = \square \rightarrow \boxed{\text{N}}$

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

Scratch space:

CLUE 4 Integers

The basement lab gets very cold. Use the thermometer to check the temperature.

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

R						R										
23	6	11	7	19	12	23	10	19	20	21	30	3	13	11	30	13
22	7	6	5	12	13	30	14	3	24	19	23	20				

$$(-7) + 30 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$(-10) + 16 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$6 - (-4) = \boxed{} \rightarrow \boxed{\text{W}}$$

$$2 - (-5) = \boxed{} \rightarrow \boxed{\text{H}}$$

$$2 - (-10) = \boxed{} \rightarrow \boxed{\text{I}}$$

$$(-4) + 18 = \boxed{} \rightarrow \boxed{\text{C}}$$

$$(-1) + 31 = \boxed{} \rightarrow \boxed{\text{O}}$$

$$5 - (-15) = \boxed{} \rightarrow \boxed{\text{S}}$$

$$(-4) + 17 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$9 - (-12) = \boxed{} \rightarrow \boxed{\text{F}}$$

$$20 - (-2) = \boxed{} \rightarrow \boxed{\text{T}}$$

$$(-15) + 20 = \boxed{} \rightarrow \boxed{\text{B}}$$

$$(-2) + 5 = \boxed{} \rightarrow \boxed{\text{U}}$$

$$18 - (-6) = \boxed{} \rightarrow \boxed{\text{L}}$$

$$10 - (-9) = \boxed{} \rightarrow \boxed{\text{A}}$$

$$(-1) + 12 = \boxed{} \rightarrow \boxed{\text{D}}$$

Scratch space:

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

We have clues to share. Divide the clue cards among the team members.

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:

$30 \div 3 = \boxed{}$

$8 \div 8 = \boxed{}$

$30 \div 10 = \boxed{}$

$108 \div 12 = \boxed{}$

$48 \div 4 = \boxed{}$

$24 \div 6 = \boxed{}$

$110 \div 10 = \boxed{}$

$10 \div 5 = \boxed{}$

$12 \div 2 = \boxed{}$

$10 \div 2 = \boxed{}$

$7 \div 1 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain turns on the night goggles, then climbs the tall oak tree.
2. The villain uses the spy camera, then slides down the long zip line.
3. The villain activates the jet shoes, then opens the secret safe.
4. The villain fires the laser pen, then sneaks past the motion sensors.
5. The villain turns on the night goggles, then sneaks past the motion sensors.
6. The villain uses the spy camera, then climbs the tall oak tree.
7. The villain fires the laser pen, then opens the secret safe.
8. The villain throws the grappling hook, then opens the secret safe.
9. The villain throws the grappling hook, then cracks the training code.
10. The villain turns on the night goggles, then slides down the long zip line.
11. The villain fires the laser pen, then climbs the tall oak tree.
12. The villain throws the grappling hook, then climbs the tall oak tree.

Answer Key

The Secret Agent Treehouse Mystery

Culprit: Dan

Grappling Hook · Safe Cracking · Right-handed · Red Hair · Cookie

Trail: Start 21 → Clue 1 18 → Clue 2 9 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT USE CODE BREAKING"

$2304 + 2637 = 4941$ (T) · $1402 + 2591 = 3993$ (G) · $3764 + 1849 = 5613$ (V) · $2376 + 2972 = 5348$ (L) · $2604 + 2992 = 5596$ (I) · $1696 + 2853 = 4549$ (C) · $3462 + 4999 = 8461$ (B) · $1185 + 1822 = 3007$ (A) · $2263 + 3747 = 6010$ (O) · $2884 + 3494 = 6378$ (N) · $5523 + 2448 = 7971$ (H) · $4144 + 5582 = 9726$ (U) · $1198 + 1075 = 2273$ (E) · $2671 + 4467 = 7138$ (S) · $3807 + 2754 = 6561$ (R) · $3684 + 3764 = 7448$ (K) · $2670 + 2697 = 5367$ (D)

Clue 2 (Subtraction): "THE ROGUE AGENT WRITES WITH THE RIGHT HAND"

$9958 - 2743 = 7215$ (T) · $9638 - 675 = 8963$ (D) · $6996 - 4894 = 2102$ (H) · $10624 - 4567 = 6057$ (E) · $5543 - 1775 = 3768$ (S) · $8507 - 4565 = 3942$ (R) · $11144 - 3077 = 8067$ (G) · $3034 - 641 = 2393$ (N) · $6705 - 56 = 6649$ (W) · $5813 - 466 = 5347$ (U) · $13096 - 4183 = 8913$ (A) · $6389 - 3294 = 3095$ (I) · $12670 - 4370 = 8300$ (O)

Clue 3 (Multiplication facts (1-12)): "THE ROGUE AGENT STOPPED TO EAT A COOKIE"

$8 \times 9 = 72$ (T) · $6 \times 10 = 60$ (D) · $9 \times 12 = 108$ (A) · $8 \times 2 = 16$ (O) · $10 \times 12 = 120$ (H) · $9 \times 9 = 81$ (E) · $11 \times 12 = 132$ (S) · $4 \times 8 = 32$ (P) · $4 \times 12 = 48$ (C) · $9 \times 5 = 45$ (G) · $7 \times 11 = 77$ (R) · $10 \times 5 = 50$ (K) · $10 \times 8 = 80$ (I) · $9 \times 3 = 27$ (N) · $12 \times 12 = 144$ (U)

Clue 4 (Integers): "RED HAIR WAS FOUND ON THE BINOCULARS"

$(-7) + 30 = 23$ (R) · $(-10) + 16 = 6$ (E) · $6 - (-4) = 10$ (W) · $2 - (-5) = 7$ (H) · $2 - (-10) = 12$ (I) · $(-4) + 18 = 14$ (C) · $(-1) + 31 = 30$ (O) · $5 - (-15) = 20$ (S) · $(-4) + 17 = 13$ (N) · $9 - (-12) = 21$ (F) · $20 - (-2) = 22$ (T) · $(-15) + 20 = 5$ (B) · $(-2) + 5 = 3$ (U) · $18 - (-6) = 24$ (L) · $10 - (-9) = 19$ (A) · $(-1) + 12 = 11$ (D)

Clue 5 (Division facts (1-12)): surviving statement is box 8 → Dan

$30 \div 3 = 10$ · $8 \div 8 = 1$ · $30 \div 10 = 3$ · $108 \div 12 = 9$ · $48 \div 4 = 12$ · $24 \div 6 = 4$ · $110 \div 10 = 11$ · $10 \div 5 = 2$ · $12 \div 2 = 6$ · $10 \div 2 = 5$ · $7 \div 1 = 7$