



The Whispering Isle Academy Mystery

Grade 7 math · Fractions of a number, Integers, Percentages, Order of operations · Reading level grades 7-9

Detective: _____ Date: _____

A high-tech relic has been swiped from the secure vaults of the Whispering Isle Academy. The campus is on lockdown, and the Academy Curator needs your team to analyze the telemetry data, decode the clues, and unmask the rogue recruit before they escape the island.

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 recruit is _____

Possible suspects

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

NAME	ADVENTURE GEAR	SPECIALIST SKILL	GEAR PLACEMENT	CLIMBING HELMET COLOR	VULNERABILITY
Zuri Patel	grappling glove	drone hacking	holstered on right	matte black helmet	magnetic sticky traps
Paige Archer	laser torch	vault cracking	holstered on left	matte black helmet	bright strobe lights
Cole Bishop	decoy drone	drone hacking	holstered on left	matte black helmet	magnetic sticky traps
Luna Drake	glider cape	signal jamming	holstered on left	neon blue helmet	magnetic sticky traps
Xander Finch	grappling glove	signal jamming	holstered on left	neon blue helmet	bright strobe lights
Kira Thorne	sonar visor	vault cracking	holstered on left	blaze orange helmet	high frequency sirens
Damian Ryder	sonar visor	drone hacking	holstered on left	matte black helmet	bright strobe lights
Brody Stone	grappling glove	stealth climbing	holstered on left	blaze orange helmet	bright strobe lights
Nadia Chen	glider cape	drone hacking	holstered on right	matte black helmet	bright strobe lights
Maya Sterling	decoy drone	vault cracking	holstered on right	matte black helmet	high frequency sirens
Leo Vance	laser torch	drone hacking	holstered on left	blaze orange helmet	high frequency sirens
Jax Taylor	laser torch	vault cracking	holstered on left	neon blue helmet	high frequency sirens
Gavin Knox	grappling glove	vault cracking	holstered on left	blaze orange helmet	bright strobe lights
Elena Rostova	sonar visor	stealth climbing	holstered on right	matte black helmet	bright strobe lights
Tessa Brooks	glider cape	signal jamming	holstered on left	matte black helmet	bright strobe lights
Chloe Vale	decoy drone	map decoding	holstered on left	matte black helmet	bright strobe lights
Zoe Mercer	glider cape	signal jamming	holstered on left	blaze orange helmet	high frequency sirens
Sienna Frost	grappling glove	drone hacking	holstered on right	blaze orange helmet	high frequency sirens
Rider Cruz	laser torch	map decoding	holstered on right	neon blue helmet	bright strobe lights
Marcus Flint	glider cape	vault cracking	holstered on left	matte black helmet	high frequency sirens
Devon Hayes	sonar visor	vault cracking	holstered on left	matte black helmet	bright strobe lights

CLUE 1

Fractions of a number

The academy security console is locked behind a fractional key. We need to analyze a portion of the active network ports to bypass the firewall and find our first lead.

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

T

39 35 48

53 14 21 21 18 14 56

3 30 48 29

56 30 **T**

39

58 29 48

59 18 12

3 48 37 30

3 14 56 2

$\frac{1}{4}$ of 156 = → T	$\frac{2}{6}$ of 42 = → I	$\frac{4}{6}$ of 72 = → E
$\frac{1}{6}$ of 174 = → S	$\frac{1}{4}$ of 72 = → A	$\frac{2}{4}$ of 112 = → N
$\frac{1}{3}$ of 159 = → V	$\frac{3}{4}$ of 28 = → L	$\frac{1}{5}$ of 175 = → H
$\frac{4}{10}$ of 5 = → G	$\frac{4}{8}$ of 118 = → M	$\frac{1}{3}$ of 174 = → U
$\frac{5}{8}$ of 48 = → O	$\frac{2}{6}$ of 36 = → P	$\frac{5}{10}$ of 74 = → C
$\frac{2}{4}$ of 6 = → D		

Scratch space:

CLUE 2

Deep in the subterranean tunnels, the temperature sensors register rapid rises and falls in elevation. Tracking these integer shifts will pinpoint where the intruder fled.

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

$26 - (-4) = \boxed{} \rightarrow \boxed{\text{T}}$

$$(-9) + 37 = \boxed{} \rightarrow \boxed{\text{O}}$$

$17 - (-12) = \boxed{} \rightarrow \boxed{\text{S}}$

$5 - (-12) = \boxed{} \rightarrow \boxed{\mathbf{A}}$

$$(-9) + 22 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$2 - (-9) = \boxed{} \rightarrow \boxed{\text{N}}$$

$$(-15) + 24 = \boxed{} \rightarrow \boxed{\text{F}}$$

$$(-6) + 12 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$(-6) + 10 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$(-13) + 16 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$19 - (-4) = \boxed{} \rightarrow \boxed{\text{R}}$$

$$(-15) + 22 = \boxed{} \rightarrow \boxed{\mathbf{G}}$$

$$(-8) + 10 = \boxed{} \rightarrow \boxed{\text{C}}$$

Scratch space:

CLUE 3 Percentages

The backup energy grid is draining rapidly. To restore the lights, we must calculate the exact percentage of power remaining in the emergency battery banks.

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

T																			
53	55	58	51	14	51	41	58	23	53	40	4	8	19	43	58	43	40	27	
40	57	8	32	55	53	51	53	57	34	40	58	51							

20% of 265 = → T	50% of 82 = → P	40% of 145 = → E
25% of 172 = → D	25% of 220 = → H	20% of 170 = → O
5% of 800 = → B	50% of 64 = → G	10% of 80 = → I
5% of 380 = → N	10% of 230 = → C	10% of 40 = → L
10% of 570 = → R	50% of 102 = → S	10% of 270 = → Y
20% of 70 = → U		

Scratch space:

CLUE 4 Order of operations

The vault door uses a strict chronological passcode. Solving this multi-step priority sequence unlocks the security cameras pointing at the courtyard.

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

B																			
66	23	21	44	7	115	21	13	76	103	97	21	106	106	44	116	21	115	40	120
92	12	12	103	104	40	46	116	21	103	40									

$54 + 4 \times 3 = \square \rightarrow \mathbf{B}$	$87 + 4 \times 7 = \square \rightarrow \mathbf{P}$	$31 + 8 \times 9 = \square \rightarrow \mathbf{T}$
$3 \times 9 - 14 = \square \rightarrow \mathbf{I}$	$10 \times 12 - 16 = \square \rightarrow \mathbf{H}$	$11 \times 11 - 1 = \square \rightarrow \mathbf{D}$
$3 + 3 \times 3 = \square \rightarrow \mathbf{F}$	$10 + 5 \times 6 = \square \rightarrow \mathbf{E}$	$12 \times 10 - 23 = \square \rightarrow \mathbf{W}$
$44 + 8 \times 9 = \square \rightarrow \mathbf{R}$	$15 + 3 \times 2 = \square \rightarrow \mathbf{A}$	$31 + 5 \times 9 = \square \rightarrow \mathbf{N}$
$3 + 2 \times 2 = \square \rightarrow \mathbf{K}$	$5 \times 11 - 11 = \square \rightarrow \mathbf{C}$	$9 \times 12 - 16 = \square \rightarrow \mathbf{O}$
$8 \times 3 - 1 = \square \rightarrow \mathbf{L}$	$92 + 7 \times 2 = \square \rightarrow \mathbf{S}$	$14 + 4 \times 8 = \square \rightarrow \mathbf{G}$

Scratch space:

CLUE 5**Fractions of a number - the last clue**

A shattered tracker on the academy docks left behind a fragmented data log. Restoring a fraction of the corrupted files will reveal the final clue.

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:

$1/5 \text{ of } 55 = \boxed{}$

$2/8 \text{ of } 32 = \boxed{}$

$2/10 \text{ of } 5 = \boxed{}$

$1/2 \text{ of } 4 = \boxed{}$

$1/8 \text{ of } 96 = \boxed{}$

$4/10 \text{ of } 10 = \boxed{}$

$3/5 \text{ of } 15 = \boxed{}$

$1/2 \text{ of } 10 = \boxed{}$

$4/6 \text{ of } 15 = \boxed{}$

$4/8 \text{ of } 14 = \boxed{}$

$1/4 \text{ of } 12 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain scanned the dark chambers using a sonar visor, then hijacked the automated defense grid using drone hacking.
2. The villain melted the steel vault hinges with a laser torch, then calculated the hidden exit route using map decoding.
3. The villain melted the steel vault hinges with a laser torch, then disabled the local security feed using signal jamming.
4. The villain distracted the perimeter guards with a decoy drone, then calculated the hidden exit route using map decoding.
5. The villain distracted the perimeter guards with a decoy drone, then bypassed the digital locks via vault cracking.
6. The villain glided silently from the rafters with a glider cape, then disabled the local security feed using signal jamming.
7. The villain glided silently from the rafters with a glider cape, then scaled the sheer obsidian wall via stealth climbing.
8. The villain scanned the dark chambers using a sonar visor, then bypassed the digital locks via vault cracking.
9. The villain distracted the perimeter guards with a decoy drone, then disabled the local security feed using signal jamming.
10. The villain melted the steel vault hinges with a laser torch, then hijacked the automated defense grid using drone hacking.
11. The villain melted the steel vault hinges with a laser torch, then bypassed the digital locks via vault cracking.
12. The villain distracted the perimeter guards with a decoy drone, then hijacked the automated defense grid using drone hacking.

Answer Key

The Whispering Isle Academy Mystery

Culprit: Tessa Brooks

glider cape · signal jamming · holstered on left · matte black helmet · bright strobe lights

Trail: Start 21 → Clue 1 19 → Clue 2 14 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Fractions of a number): "THE VILLAIN DOES NOT USE MAP DECODING"

$\frac{1}{4}$ of 156 = 39 (T) · $\frac{2}{6}$ of 42 = 14 (I) · $\frac{4}{6}$ of 72 = 48 (E) · $\frac{1}{6}$ of 174 = 29 (S) · $\frac{1}{4}$ of 72 = 18 (A) · $\frac{2}{4}$ of 112 = 56 (N) · $\frac{1}{3}$ of 159 = 53 (V) · $\frac{3}{4}$ of 28 = 21 (L) · $\frac{1}{5}$ of 175 = 35 (H) · $\frac{4}{10}$ of 5 = 2 (G) · $\frac{4}{8}$ of 118 = 59 (M) · $\frac{1}{3}$ of 174 = 58 (U) · $\frac{5}{8}$ of 48 = 30 (O) · $\frac{2}{6}$ of 36 = 12 (P) · $\frac{5}{10}$ of 74 = 37 (C) · $\frac{2}{4}$ of 6 = 3 (D)

Clue 2 (Integers): "THE SENSOR DETECTED GEAR ON THE LEFT"

$26 - (-4) = 30$ (T) · $(-9) + 37 = 28$ (O) · $17 - (-12) = 29$ (S) · $5 - (-12) = 17$ (A) · $(-9) + 22 = 13$ (D) · $2 - (-9) = 11$ (N) · $(-15) + 24 = 9$ (F) · $(-6) + 12 = 6$ (H) · $(-6) + 10 = 4$ (L) · $(-13) + 16 = 3$ (E) · $19 - (-4) = 23$ (R) · $(-15) + 22 = 7$ (G) · $(-8) + 10 = 2$ (C)

Clue 3 (Percentages): "THE SUSPECT BLINDED BY BRIGHT STROBES"

20% of 265 = 53 (T) · 50% of 82 = 41 (P) · 40% of 145 = 58 (E) · 25% of 172 = 43 (D) · 25% of 220 = 55 (H) · 20% of 170 = 34 (O) · 5% of 800 = 40 (B) · 50% of 64 = 32 (G) · 10% of 80 = 8 (I) · 5% of 380 = 19 (N) · 10% of 230 = 23 (C) · 10% of 40 = 4 (L) · 10% of 570 = 57 (R) · 50% of 102 = 51 (S) · 10% of 270 = 27 (Y) · 20% of 70 = 14 (U)

Clue 4 (Order of operations): "BLACK PAINT WAS SCRAPED OFF THE GRATE"

$54 + 4 \times 3 = 66$ (B) · $87 + 4 \times 7 = 115$ (P) · $31 + 8 \times 9 = 103$ (T) · $3 \times 9 - 14 = 13$ (I) · $10 \times 12 - 16 = 104$ (H) · $11 \times 11 - 1 = 120$ (D) · $3 + 3 \times 3 = 12$ (F) · $10 + 5 \times 6 = 40$ (E) · $12 \times 10 - 23 = 97$ (W) · $44 + 8 \times 9 = 116$ (R) · $15 + 3 \times 2 = 21$ (A) · $31 + 5 \times 9 = 76$ (N) · $3 + 2 \times 2 = 7$ (K) · $5 \times 11 - 11 = 44$ (C) · $9 \times 12 - 16 = 92$ (O) · $8 \times 3 - 1 = 23$ (L) · $92 + 7 \times 2 = 106$ (S) · $14 + 4 \times 8 = 46$ (G)

Clue 5 (Fractions of a number): surviving statement is box 6 → Tessa Brooks

$\frac{1}{5}$ of 55 = 11 · $\frac{2}{8}$ of 32 = 8 · $\frac{2}{10}$ of 5 = 1 · $\frac{1}{2}$ of 4 = 2 · $\frac{1}{8}$ of 96 = 12 · $\frac{4}{10}$ of 10 = 4 · $\frac{3}{5}$ of 15 = 9 · $\frac{1}{2}$ of 10 = 5 · $\frac{4}{6}$ of 15 = 10 · $\frac{4}{8}$ of 14 = 7 · $\frac{1}{4}$ of 12 = 3