



The Radar Room Sabotage

Grade 5 math · Multiplication, Addition, Subtraction, Place value, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

An unknown operator has bypassed security and scrambled Fort Sentinel's tactical radar array right before the grand training exercises! We must decode the clues and pinpoint the culprit.

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 Saboteur is _____

Possible suspects

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

NAME	SPECIALTY	TACTICAL GEAR	SALUTE STYLE	HEADGEAR	VULNERABILITY
Sergeant Walker	Drone Pilot	Tactical Radio	Left-Handed Salute	Crew Cut Hair	Loud Alarm Sirens
Admiral Butler	Heavy Artillery	Night Vision Goggles	Right-Handed Salute	Crew Cut Hair	Loud Alarm Sirens
Colonel Vance	Drone Pilot	Tactical Radio	Right-Handed Salute	Beret Hat	Bright Searchlights
Captain Travis	Heavy Artillery	Night Vision Goggles	Right-Handed Salute	Beret Hat	Water Sprinklers
Sergeant Clark	Code Breaker	Signal Jammer	Left-Handed Salute	Beret Hat	Bright Searchlights
Admiral Sherman	Stealth Recon	Smoke Grenades	Right-Handed Salute	Camouflage Helmet	Loud Alarm Sirens
Lieutenant Webb	Drone Pilot	Laser Pointer	Right-Handed Salute	Crew Cut Hair	Loud Alarm Sirens
General Eisenhower	Heavy Artillery	Signal Jammer	Right-Handed Salute	Crew Cut Hair	Loud Alarm Sirens
Admiral Washington	Stealth Recon	Night Vision Goggles	Right-Handed Salute	Crew Cut Hair	Loud Alarm Sirens
Captain Halsey	Fleet Admiral	Night Vision Goggles	Right-Handed Salute	Camouflage Helmet	Loud Alarm Sirens
Commander Nimitz	Code Breaker	Smoke Grenades	Left-Handed Salute	Crew Cut Hair	Bright Searchlights
Colonel Grant	Code Breaker	Signal Jammer	Right-Handed Salute	Crew Cut Hair	Water Sprinklers
Captain Davis	Stealth Recon	Night Vision Goggles	Left-Handed Salute	Camouflage Helmet	Loud Alarm Sirens
Commander Knox	Drone Pilot	Smoke Grenades	Left-Handed Salute	Crew Cut Hair	Water Sprinklers
Major Ridley	Fleet Admiral	Night Vision Goggles	Right-Handed Salute	Camouflage Helmet	Bright Searchlights
Major Bradley	Stealth Recon	Tactical Radio	Left-Handed Salute	Beret Hat	Loud Alarm Sirens
Sergeant York	Stealth Recon	Night Vision Goggles	Right-Handed Salute	Beret Hat	Water Sprinklers
Colonel Taylor	Fleet Admiral	Tactical Radio	Left-Handed Salute	Camouflage Helmet	Bright Searchlights
General Marshall	Stealth Recon	Laser Pointer	Right-Handed Salute	Crew Cut Hair	Loud Alarm Sirens
Lieutenant Lee	Stealth Recon	Smoke Grenades	Right-Handed Salute	Beret Hat	Bright Searchlights
Commander MacArthur	Fleet Admiral	Tactical Radio	Right-Handed Salute	Crew Cut Hair	Water Sprinklers

Multiplication facts (1-12)

To locate the suspect's gear crates, we need to multiply the rows of supply trucks by the items in each load.

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

Diagram illustrating a sequence of 18 boxes (1 to 18) arranged in two rows. The boxes are numbered 1 to 18 below them. Boxes 1, 5, and 18 are highlighted in orange and contain the letter 'T'. All other boxes are empty.

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18						

$12 \times 11 = \boxed{} \rightarrow \boxed{\text{T}}$

$7 \times 5 = \boxed{} \rightarrow \boxed{\text{G}}$

$$9 \times 7 = \boxed{} \rightarrow \boxed{0}$$

$1 \times 7 = \square \rightarrow \boxed{\mathbf{U}}$

$3 \times 6 = \square \rightarrow \boxed{\text{D}}$

$1 \times 11 = \square \rightarrow \boxed{\mathbf{H}}$

$3 \times 4 = \boxed{} \rightarrow \boxed{\text{A}}$

$$10 \times 1 = \boxed{} \rightarrow \boxed{\text{N}}$$

$12 \times 8 = \boxed{} \rightarrow \boxed{\text{S}}$

$9 \times 10 = \boxed{} \rightarrow \boxed{1}$

$3 \times 9 = \square \rightarrow \mathbf{M}$

$10 \times 2 = \boxed{} \rightarrow \boxed{\text{R}}$

$12 \times 9 = \square \rightarrow \mathbf{B}$

$1 \times 2 = \square \rightarrow \boxed{\mathbf{L}}$

$5 \times 3 = \square \rightarrow \boxed{\mathbf{E}}$

$$11 \times 11 = \boxed{} \rightarrow \boxed{\text{J}}$$

Scratch space:

CLUE 2 Addition

Our scouts tallied the total number of security checkpoints passed. We must add these patrol reports together.

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

T									T					T		
7450	2025	4111	2862	3191	2862	2297	4111	7984	7450	2862	7957	4450	3191	7450	4111	3695

		T		T								T				
2465	5295	7450	2025	7450	2025	4111	5295	3950	3950	5295	2320	2025	7450	2025	7957	3557

$4360 + 3090 = \square \rightarrow$ T	$1360 + 960 = \square \rightarrow$ G	$2580 + 2715 = \square \rightarrow$ I
$1226 + 1636 = \square \rightarrow$ S	$1811 + 1884 = \square \rightarrow$ D	$1113 + 1184 = \square \rightarrow$ P
$3163 + 4794 = \square \rightarrow$ A	$1661 + 1530 = \square \rightarrow$ U	$2268 + 1843 = \square \rightarrow$ E
$5079 + 2905 = \square \rightarrow$ C	$648 + 1377 = \square \rightarrow$ H	$1424 + 1041 = \square \rightarrow$ W
$1250 + 2307 = \square \rightarrow$ N	$2439 + 1511 = \square \rightarrow$ R	$2946 + 1504 = \square \rightarrow$ L

Scratch space:

CLUE 3
Subtraction

The supply officer wants to find how much fuel was taken from the reserve tank by subtracting the leftover barrels.

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

T																		T
3347	2585	1488	1508	4300	7606	7606	1954	4300	5713	2053	4007	6458	1488	2737	1488	2448	1954	3347

T												
3347	2585	1488	7606	4007	8303	2448	1954	7606	1954	2737	4145	2071

$6039 - 2692 = \square \rightarrow \text{**T**}$

$6227 - 4739 = \square \rightarrow \text{**E**}$

$11626 - 4020 = \square \rightarrow \text{**L**}$

$4103 - 2149 = \square \rightarrow \text{**A**}$

$6356 - 3771 = \square \rightarrow \text{**H**}$

$6806 - 4735 = \square \rightarrow \text{**S**}$

$6540 - 82 = \square \rightarrow \text{**W**}$

$5622 - 3174 = \square \rightarrow \text{**D**}$

$4834 - 534 = \square \rightarrow \text{**I**}$

$7686 - 4949 = \square \rightarrow \text{**R**}$

$10640 - 4927 = \square \rightarrow \text{**N**}$

$13148 - 4845 = \square \rightarrow \text{**U**}$

$4993 - 3485 = \square \rightarrow \text{**V**}$

$6972 - 4919 = \square \rightarrow \text{**C**}$

$5780 - 1773 = \square \rightarrow \text{**O**}$

$8529 - 4384 = \square \rightarrow \text{**M**}$

Scratch space:

CLUE 4 Place value

The security lock has a scrambled digital code. We must read the exact value of the hundreds digit to open it.

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

A																
60	900	3000	400	20	8000	500	20	800	900	8000	100	9000	50	20	7000	10

				A				A						
50	80	8000	3000	60	800	20	10	60	900	40	400	80	300	700

What is the value of the 6 in 20,069? → **A**

What is the value of the 1 in 44,516? → **W**

What is the value of the 8 in 67,182? → **U**

What is the value of the 5 in 294,527? → **B**

What is the value of the 9 in 79,333? → **Y**

What is the value of the 8 in 47,812? → **I**

What is the value of the 4 in 223,482? → **O**

What is the value of the 3 in 983,650? → **H**

What is the value of the 1 in 66,144? → **L**

What is the value of the 4 in 67,240? → **F**

What is the value of the 7 in 854,713? → **D**

What is the value of the 7 in 27,889? → **E**

What is the value of the 3 in 514,309? → **N**

What is the value of the 5 in 944,953? → **C**

What is the value of the 9 in 61,956? → **S**

What is the value of the 8 in 398,277? → **T**

What is the value of the 2 in 13,526? → **R**

Scratch space:

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

We need to distribute the heavy shield barricades equally among the squads to see how many each team gets.

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:

$30 \div 6 = \boxed{}$

$45 \div 5 = \boxed{}$

$48 \div 4 = \boxed{}$

$30 \div 5 = \boxed{}$

$27 \div 9 = \boxed{}$

$90 \div 9 = \boxed{}$

$4 \div 1 = \boxed{}$

$55 \div 5 = \boxed{}$

$28 \div 4 = \boxed{}$

$12 \div 6 = \boxed{}$

$12 \div 12 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain unlocked the command vault, then swapped the radio codes.
2. The villain sneaked into the bunker, then cut the power cables.
3. The villain disguised as a technician, then swapped the radio codes.
4. The villain bypassed the gate guard, then cut the power cables.
5. The villain sneaked into the bunker, then stole the sector maps.
6. The villain disguised as a technician, then scrambled the coordinates.
7. The villain scaled the radar tower, then scrambled the coordinates.
8. The villain unlocked the command vault, then stole the sector maps.
9. The villain scaled the radar tower, then swapped the radio codes.
10. The villain disguised as a technician, then stole the sector maps.
11. The villain bypassed the gate guard, then jammed the radar screen.
12. The villain sneaked into the bunker, then swapped the radio codes.

Answer Key

The Radar Room Sabotage

Culprit: Lieutenant Webb

Drone Pilot · Laser Pointer · Right-Handed Salute · Crew Cut Hair · Loud Alarm Sirens

Trail: Start 21 → Clue 1 18 → Clue 2 12 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE SABOTEUR DOES NOT USE A SIGNAL JAMMER"

$12 \times 11 = 132$ (T) · $7 \times 5 = 35$ (G) · $9 \times 7 = 63$ (O) · $1 \times 7 = 7$ (U) · $3 \times 6 = 18$ (D) · $1 \times 11 = 11$ (H) · $3 \times 4 = 12$ (A) · $10 \times 1 = 10$ (N) · $12 \times 8 = 96$ (S) · $9 \times 10 = 90$ (I) · $3 \times 9 = 27$ (M) · $10 \times 2 = 20$ (R) · $12 \times 9 = 108$ (B) · $1 \times 2 = 2$ (L) · $5 \times 3 = 15$ (E) · $11 \times 11 = 121$ (J)

Clue 2 (Addition): "THE SUSPECT SALUTED WITH THEIR RIGHT HAND"

$4360 + 3090 = 7450$ (T) · $1360 + 960 = 2320$ (G) · $2580 + 2715 = 5295$ (I) · $1226 + 1636 = 2862$ (S) · $1811 + 1884 = 3695$ (D) · $1113 + 1184 = 2297$ (P) · $3163 + 4794 = 7957$ (A) · $1661 + 1530 = 3191$ (U) · $2268 + 1843 = 4111$ (E) · $5079 + 2905 = 7984$ (C) · $648 + 1377 = 2025$ (H) · $1424 + 1041 = 2465$ (W) · $1250 + 2307 = 3557$ (N) · $2439 + 1511 = 3950$ (R) · $2946 + 1504 = 4450$ (L)

Clue 3 (Subtraction): "THE VILLAIN COWERED AT THE LOUD ALARMS"

$6039 - 2692 = 3347$ (T) · $6227 - 4739 = 1488$ (E) · $11626 - 4020 = 7606$ (L) · $4103 - 2149 = 1954$ (A) · $6356 - 3771 = 2585$ (H) · $6806 - 4735 = 2071$ (S) · $6540 - 82 = 6458$ (W) · $5622 - 3174 = 2448$ (D) · $4834 - 534 = 4300$ (I) · $7686 - 4949 = 2737$ (R) · $10640 - 4927 = 5713$ (N) · $13148 - 4845 = 8303$ (U) · $4993 - 3485 = 1508$ (V) · $6972 - 4919 = 2053$ (C) · $5780 - 1773 = 4007$ (O) · $8529 - 4384 = 4145$ (M)

Clue 4 (Place value): "A SHORT BRISTLY CREW CUT HAIR WAS FOUND"

What is the value of the 6 in 20,069? = 60 (A) · What is the value of the 1 in 44,516? = 10 (W) · What is the value of the 8 in 67,182? = 80 (U) · What is the value of the 5 in 294,527? = 500 (B) · What is the value of the 9 in 79,333? = 9000 (Y) · What is the value of the 8 in 47,812? = 800 (I) · What is the value of the 4 in 223,482? = 400 (O) · What is the value of the 3 in 983,650? = 3000 (H) · What is the value of the 1 in 66,144? = 100 (L) · What is the value of the 4 in 67,240? = 40 (F) · What is the value of the 7 in 854,713? = 700 (D) · What is the value of the 7 in 27,889? = 7000 (E) · What is the value of the 3 in 514,309? = 300 (N) · What is the value of the 5 in 944,953? = 50 (C) · What is the value of the 9 in 61,956? = 900 (S) · What is the value of the 8 in 398,277? = 8000 (T) · What is the value of the 2 in 13,526? = 20 (R)

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

$30 \div 6 = 5$ · $45 \div 5 = 9$ · $48 \div 4 = 12$ · $30 \div 5 = 6$ · $27 \div 9 = 3$ · $90 \div 9 = 10$ · $4 \div 1 = 4$ · $55 \div 5 = 11$ · $28 \div 4 = 7$ · $12 \div 6 = 2$ · $12 \div 12 = 1$