



Sabotage on the USS Defender

Grade 5 math · Addition, Subtraction, Multiplication, Place value, Fractions of a number · Reading level grades 5-6

Detective: _____ Date: _____

An unknown culprit has disrupted the ship's defense computer right in the middle of a high-stakes naval training drill. You must examine the clues, solve the training puzzles, and secure the destroyer before the fleet sails.

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	PRIMARY DUTY	SPECIALTY GEAR	OBSERVED GEAR	HAIR STYLE	TACTICAL FLAW
Chief Petty Officer Jackson	Chief Engineer	tactical tablet	wears a ballcap	buzzcut brown hair	seasickness
Lieutenant Chen	Comm Specialist	laser rangefinder	wears a ballcap	cropped black hair	bright glare
Lieutenant Commander Ramirez	Navigator	thermal goggles	wears a ballcap	buzzcut brown hair	seasickness
Petty Officer Smith	Weapons Officer	tactical tablet	wears a headset	wavy blonde hair	seasickness
Lieutenant Garcia	Chief Engineer	thermal goggles	wears a headset	buzzcut brown hair	loud sirens
Seaman Thomas	Sonar Operator	tactical tablet	wears a ballcap	wavy blonde hair	loud sirens
Lieutenant Lewis	Comm Specialist	encrypted radio	wears a ballcap	buzzcut brown hair	seasickness
Ensign Bradley	Navigator	thermal goggles	wears a headset	buzzcut brown hair	bright glare
Chief Petty Officer Davis	Weapons Officer	laser rangefinder	wears a headset	buzzcut brown hair	loud sirens
Ensign Taylor	Chief Engineer	thermal goggles	wears a ballcap	buzzcut brown hair	bright glare
Commander Martin	Weapons Officer	thermal goggles	wears a ballcap	buzzcut brown hair	seasickness
Ensign Thompson	Sonar Operator	laser rangefinder	wears a ballcap	cropped black hair	bright glare
Captain Vance	Comm Specialist	heavy multi tool	wears a headset	buzzcut brown hair	loud sirens
Chief Petty Officer Miller	Sonar Operator	laser rangefinder	wears a headset	buzzcut brown hair	seasickness
Commander Baker	Weapons Officer	encrypted radio	wears a headset	wavy blonde hair	bright glare
Commander Martinez	Sonar Operator	tactical tablet	wears a headset	buzzcut brown hair	bright glare
Lieutenant White	Weapons Officer	laser rangefinder	wears a ballcap	buzzcut brown hair	seasickness
Petty Officer Harris	Comm Specialist	thermal goggles	wears a headset	buzzcut brown hair	seasickness
Chief Petty Officer Clark	Weapons Officer	thermal goggles	wears a ballcap	cropped black hair	seasickness
Petty Officer Wilson	Comm Specialist	tactical tablet	wears a ballcap	cropped black hair	seasickness
Petty Officer Robinson	Navigator	thermal goggles	wears a ballcap	buzzcut brown hair	bright glare

CLUE 1 Addition

We need to tally the extra crates of backup gear loaded onto the ship. Add up the cargo supplies below to find out how many items we are tracking.

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

T											T					
5170	8961	7075	9546	5329	7075	4055	5329	7075	6665	6552	5329	5170	8961	4003	3751	7075

T								T								
5170	8961	7075	7075	6552	5040	5729	9840	5622	5170	7075	4055	5729	4003	4055	7211	5329

$3087 + 2083 = \square \rightarrow \mathbf{T}$	$2691 + 6270 = \square \rightarrow \mathbf{H}$	$2167 + 3455 = \square \rightarrow \mathbf{P}$
$3716 + 6124 = \square \rightarrow \mathbf{Y}$	$2620 + 3932 = \square \rightarrow \mathbf{N}$	$4291 + 2374 = \square \rightarrow \mathbf{S}$
$2933 + 2796 = \square \rightarrow \mathbf{R}$	$3508 + 1532 = \square \rightarrow \mathbf{C}$	$3092 + 3983 = \square \rightarrow \mathbf{E}$
$1291 + 2712 = \square \rightarrow \mathbf{A}$	$1954 + 2101 = \square \rightarrow \mathbf{D}$	$3098 + 4113 = \square \rightarrow \mathbf{I}$
$5468 + 4078 = \square \rightarrow \mathbf{F}$	$3727 + 1602 = \square \rightarrow \mathbf{O}$	$2501 + 1250 = \square \rightarrow \mathbf{V}$

Scratch space:

CLUE 2
Subtraction

The auxiliary fuel tank is draining rapidly into the backup engine. Subtract the lost gallons to see how much power remains on the console.

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

T																			
2609	3506	5090	4844	1513	2157	3464	4601	3464	2863	3573	2157	5090	3464	7766	5090	5874	4340	7745	7745
4601	5090	3464	4844	3129	2157	5646	3464	7271	3464	4967	4967	2701	3464	1141					

$7495 - 4886 = \square \rightarrow \boxed{\text{T}}$

$6403 - 4890 = \square \rightarrow \boxed{\text{U}}$

$9477 - 3831 = \square \rightarrow \boxed{\text{G}}$

$7762 - 4256 = \square \rightarrow \boxed{\text{H}}$

$8022 - 3178 = \square \rightarrow \boxed{\text{R}}$

$10377 - 4503 = \square \rightarrow \boxed{\text{D}}$

$3662 - 2521 = \square \rightarrow \boxed{\text{P}}$

$2427 - 270 = \square \rightarrow \boxed{\text{N}}$

$12334 - 4568 = \square \rightarrow \boxed{\text{K}}$

$3676 - 975 = \square \rightarrow \boxed{\text{C}}$

$5684 - 2821 = \square \rightarrow \boxed{\text{Y}}$

$6628 - 2027 = \square \rightarrow \boxed{\text{W}}$

$9482 - 4515 = \square \rightarrow \boxed{\text{L}}$

$5444 - 1104 = \square \rightarrow \boxed{\text{O}}$

$7385 - 3812 = \square \rightarrow \boxed{\text{S}}$

$9638 - 1893 = \square \rightarrow \boxed{\text{F}}$

$5659 - 2195 = \square \rightarrow \boxed{\text{A}}$

$3383 - 254 = \square \rightarrow \boxed{\text{I}}$

$7969 - 2879 = \square \rightarrow \boxed{\text{E}}$

$9117 - 1846 = \square \rightarrow \boxed{\text{B}}$

Scratch space:

CLUE 3
Multiplication facts (1-12)

The missile launch bay is organized in perfect storage grids. Multiply the number of rows by the tubes in each row to find the total launch capacity.

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

T					T									
1	42	35	44	100	1	45	70	48	35	45	44	81		

	T											T	
81	1	45	70	72	72	7	44	100	72	15	44	1	42

81	35	121	81	44	22	14	100	35	81	81	

$1 \times 1 = \square \rightarrow \text{T}$

$11 \times 11 = \square \rightarrow \text{A}$

$7 \times 1 = \square \rightarrow \text{L}$

$11 \times 4 = \square \rightarrow \text{I}$

$6 \times 7 = \square \rightarrow \text{H}$

$8 \times 6 = \square \rightarrow \text{D}$

$11 \times 2 = \square \rightarrow \text{C}$

$7 \times 5 = \square \rightarrow \text{E}$

$9 \times 9 = \square \rightarrow \text{S}$

$8 \times 9 = \square \rightarrow \text{G}$

$5 \times 9 = \square \rightarrow \text{R}$

$7 \times 2 = \square \rightarrow \text{K}$

$10 \times 7 = \square \rightarrow \text{U}$

$3 \times 5 = \square \rightarrow \text{W}$

$10 \times 10 = \square \rightarrow \text{N}$

Scratch space:

CLUE 4 Place value

The digital sonar screen shows a high-security target coordinate. Identify the digit in the hundreds place to unlock the next system sensor.

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

W															
500	600	6000	60	300	100	3000	1000	900	90	9000	100	3000	1000	60	6000
									W						
700	300	40	40	7000	300	900	700	90	60	500	100	70	9000	200	90

What is the value of the 5 in 877,588? → **W**

What is the value of the 1 in 591,457? → **S**

What is the value of the 3 in 553,796? → **D**

What is the value of the 7 in 197,649? → **C**

What is the value of the 9 in 79,387? → **A**

What is the value of the 1 in 386,164? → **N**

What is the value of the 3 in 429,300? → **U**

What is the value of the 6 in 956,821? → **F**

What is the value of the 9 in 34,491? → **R**

What is the value of the 9 in 610,931? → **T**

What is the value of the 7 in 239,675? → **H**

What is the value of the 4 in 825,147? → **Z**

What is the value of the 6 in 324,363? → **O**

What is the value of the 7 in 89,759? → **B**

What is the value of the 2 in 91,207? → **I**

What is the value of the 6 in 91,697? → **E**

Scratch space:

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

We have mapped out the surrounding harbor into equal patrol sectors. Find the fraction of the total sectors that have been cleared by our helicopters.

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:

$4/5 \text{ of } 10 = \boxed{}$

$3/6 \text{ of } 22 = \boxed{}$

$1/6 \text{ of } 42 = \boxed{}$

$6/10 \text{ of } 10 = \boxed{}$

$4/8 \text{ of } 18 = \boxed{}$

$1/6 \text{ of } 30 = \boxed{}$

$1/4 \text{ of } 40 = \boxed{}$

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

$8/10 \text{ of } 5 = \boxed{}$

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

$1/3 \text{ of } 9 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain sabotaged the missile defense bay, then broadcast a false distress signal.
2. The villain scrambled the navigation coordinates, then fled through the dark cargo hold.
3. The villain unlocked the engine turbines, then scanned the shoreline for escape paths.
4. The villain reprogrammed the sonar deck, then deleted the ship security logs.
5. The villain scrambled the navigation coordinates, then scanned the shoreline for escape paths.
6. The villain reprogrammed the sonar deck, then broadcast a false distress signal.
7. The villain sabotaged the missile defense bay, then fled through the dark cargo hold.
8. The villain sabotaged the missile defense bay, then scanned the shoreline for escape paths.
9. The villain reprogrammed the sonar deck, then fled through the dark cargo hold.
10. The villain unlocked the engine turbines, then pried open the control room hatch.
11. The villain unlocked the engine turbines, then deleted the ship security logs.
12. The villain scrambled the navigation coordinates, then deleted the ship security logs.

Answer Key

Sabotage on the USS Defender

Culprit: Lieutenant Commander Ramirez

Navigator · thermal goggles · wears a ballcap · buzzcut brown hair · seasickness

Trail: Start 21 → Clue 1 19 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE FOE DOES NOT HAVE THE ENCRYPTED RADIO"

$3087 + 2083 = 5170$ (T) · $2691 + 6270 = 8961$ (H) · $2167 + 3455 = 5622$ (P) · $3716 + 6124 = 9840$ (Y) · $2620 + 3932 = 6552$ (N) · $4291 + 2374 = 6665$ (S) · $2933 + 2796 = 5729$ (R) · $3508 + 1532 = 5040$ (C) · $3092 + 3983 = 7075$ (E) · $1291 + 2712 = 4003$ (A) · $1954 + 2101 = 4055$ (D) · $3098 + 4113 = 7211$ (I) · $5468 + 4078 = 9546$ (F) · $3727 + 1602 = 5329$ (O) · $2501 + 1250 = 3751$ (V)

Clue 2 (Subtraction): "THE RUNAWAY SNEAKED OFF WEARING A BALLCAP"

$7495 - 4886 = 2609$ (T) · $6403 - 4890 = 1513$ (U) · $9477 - 3831 = 5646$ (G) · $7762 - 4256 = 3506$ (H) · $8022 - 3178 = 4844$ (R) · $10377 - 4503 = 5874$ (D) · $3662 - 2521 = 1141$ (P) · $2427 - 270 = 2157$ (N) · $12334 - 4568 = 7766$ (K) · $3676 - 975 = 2701$ (C) · $5684 - 2821 = 2863$ (Y) · $6628 - 2027 = 4601$ (W) · $9482 - 4515 = 4967$ (L) · $5444 - 1104 = 4340$ (O) · $7385 - 3812 = 3573$ (S) · $9638 - 1893 = 7745$ (F) · $5659 - 2195 = 3464$ (A) · $3383 - 254 = 3129$ (I) · $7969 - 2879 = 5090$ (E) · $9117 - 1846 = 7271$ (B)

Clue 3 (Multiplication facts (1-12)): "THE INTRUDER IS STRUGGLING WITH SEASICKNESS"

$1 \times 1 = 1$ (T) · $11 \times 11 = 121$ (A) · $7 \times 1 = 7$ (L) · $11 \times 4 = 44$ (I) · $6 \times 7 = 42$ (H) · $8 \times 6 = 48$ (D) · $11 \times 2 = 22$ (C) · $7 \times 5 = 35$ (E) · $9 \times 9 = 81$ (S) · $8 \times 9 = 72$ (G) · $5 \times 9 = 45$ (R) · $7 \times 2 = 14$ (K) · $10 \times 7 = 70$ (U) · $3 \times 5 = 15$ (W) · $10 \times 10 = 100$ (N)

Clue 4 (Place value): "WE FOUND STRANDS OF BUZZCUT BROWN HAIR"

What is the value of the 5 in 877,588? = 500 (W) · What is the value of the 1 in 591,457? = 1000 (S) · What is the value of the 3 in 553,796? = 3000 (D) · What is the value of the 7 in 197,649? = 7000 (C) · What is the value of the 9 in 79,387? = 9000 (A) · What is the value of the 1 in 386,164? = 100 (N) · What is the value of the 3 in 429,300? = 300 (U) · What is the value of the 6 in 956,821? = 6000 (F) · What is the value of the 9 in 34,491? = 90 (R) · What is the value of the 9 in 610,931? = 900 (T) · What is the value of the 7 in 239,675? = 70 (H) · What is the value of the 4 in 825,147? = 40 (Z) · What is the value of the 6 in 324,363? = 60 (O) · What is the value of the 7 in 89,759? = 700 (B) · What is the value of the 2 in 91,207? = 200 (I) · What is the value of the 6 in 91,697? = 600 (E)

Clue 5 (Fractions of a number): surviving statement is box 2 → Lieutenant Commander Ramirez

$\frac{4}{5}$ of 10 = 8 · $\frac{3}{6}$ of 22 = 11 · $\frac{1}{6}$ of 42 = 7 · $\frac{6}{10}$ of 10 = 6 · $\frac{4}{8}$ of 18 = 9 · $\frac{1}{6}$ of 30 = 5 · $\frac{1}{4}$ of 40 = 10 · $\frac{1}{5}$ of 5 = 1 · $\frac{8}{10}$ of 5 = 4 · $\frac{1}{8}$ of 96 = 12 · $\frac{1}{3}$ of 9 = 3