



The Gearopolis CPU Caper

Grade 4 math · Rounding, Addition, Subtraction, Multiplication, Division · Reading level grades 5-6

Detective: _____ Date: _____

Someone hacked the main server at the Gearopolis Cyber Lab and scrambled the blueprints! We must decode the system logs to identify the rogue bot responsible before they escape with the core CPU.

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 Bot is _____

Possible suspects

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

NAME	PRIMARY MODULE	SECONDARY TOOL	BATTERY GAUGE	WIRE TYPE	REBOOT SWITCH
Volt Wire	Grapple Arm	Oil Injector	Digital Screen	Silver Cables	Freeze Ray
Axle Bolt	Rocket Boost	Radar Dish	Digital Screen	Silver Cables	Magnet Blast
Hover Disk	Plasma Shield	Solar Panel	Analog Meter	Silver Cables	Freeze Ray
Relay Switch	Rocket Boost	Micro Scanner	Digital Screen	Copper Wires	Freeze Ray
Quantum Core	Grapple Arm	Micro Scanner	Analog Meter	Silver Cables	Rust Spray
Turbo Vane	Laser Cutter	Oil Injector	Analog Meter	Copper Wires	Freeze Ray
Data Drive	Grapple Arm	Solar Panel	Digital Screen	Silver Cables	Freeze Ray
Iron Sprocket	Grapple Arm	Solar Panel	Analog Meter	Fiber Optics	Freeze Ray
Echo Node	Grapple Arm	Oil Injector	Analog Meter	Silver Cables	Freeze Ray
Gear Widget	Laser Cutter	Micro Scanner	Analog Meter	Silver Cables	Rust Spray
Beep Boop	Sonic Cannon	Oil Injector	Digital Screen	Silver Cables	Rust Spray
Vector Ray	Sonic Cannon	Radar Dish	Analog Meter	Copper Wires	Rust Spray
Zinc Plate	Plasma Shield	Welder Torch	Digital Screen	Silver Cables	Freeze Ray
Micro Switch	Sonic Cannon	Welder Torch	Digital Screen	Silver Cables	Rust Spray
Pixel Grid	Plasma Shield	Micro Scanner	Digital Screen	Silver Cables	Freeze Ray
Unit Zero	Grapple Arm	Welder Torch	Analog Meter	Silver Cables	Magnet Blast
Sensor Array	Rocket Boost	Welder Torch	Digital Screen	Fiber Optics	Freeze Ray
Oil Can	Plasma Shield	Radar Dish	Digital Screen	Silver Cables	Freeze Ray
Circuit Chip	Laser Cutter	Micro Scanner	Digital Screen	Fiber Optics	Magnet Blast
Kilo Watt	Sonic Cannon	Welder Torch	Digital Screen	Fiber Optics	Rust Spray
Nano Mesh	Sonic Cannon	Welder Torch	Analog Meter	Copper Wires	Freeze Ray

CLUE 1 Rounding

The long-range radar screen only shows distance readouts rounded to the nearest ten.

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

Diagram illustrating the numbers 110, 130, 3000, 3700, 90, 4300, 300, 3000, 70, 90, 110, 30, 90, 3000, 370, 200, 90, 110, 300, 370, 3000, 500, 1300, 3000, 9000, 30, 3000, 3700, 110, 90, 3700, 7000, 130. The numbers are arranged in two rows, with the top row containing 15 numbers and the bottom row containing 14 numbers. The numbers 110, 130, 3000, 3700, 90, 4300, 300, 3000, 70, 90, 110, 30, 90, 3000, 370, 200, 90, 110, 300, 370, 3000, 500, 1300, 3000, 9000, 30, 3000, 3700, 110, 90, 3700, 7000, 130 are shown in boxes. The boxes for 110, 130, 3000, 3700, 90, 4300, 300, 3000, 70, 90, 110, 30, 90, 3000, 370, 200, 90, 110, 300, 370, 3000, 500, 1300, 3000, 9000, 30, 3000, 3700, 110, 90, 3700, 7000, 130 are shaded orange. The boxes for 110, 130, 3000, 3700, 90, 4300, 300, 3000, 70, 90, 110, 30, 90, 3000, 370, 200, 90, 110, 300, 370, 3000, 500, 1300, 3000, 9000, 30, 3000, 3700, 110, 90, 3700, 7000, 130 are shaded orange.

Round 114 to the nearest ten $\rightarrow$ **T**

Round 540 to the nearest hundred $\rightarrow$ **A**

Round 1,251 to the nearest hundred → **W**

Round 3,480 to the nearest thousand $\rightarrow$ **E**

Round 89 to the nearest ten $\rightarrow$

Round 154 to the nearest hundred → **N**

Round 333 to the nearest hundred $\rightarrow$ **U**

Round 34 to the nearest ten $\rightarrow$ **D**

Round 6,526 to the nearest thousand → **C**

Round 8,563 to the nearest thousand $\rightarrow$ **L**

Round 4,273 to the nearest hundred → **G**

Round 70 to the nearest ten $\rightarrow$ **B**

Round 131 to the nearest ten $\rightarrow$ **H**

Round 366 to the nearest ten $\rightarrow$ **S**

Round 3,705 to the nearest hundred → **R**

Scratch space:

CLUE 2 Addition

The head engineer adds up total voltage spikes recorded in the security logs.

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

W									W							
7447	7753	7781	8088	9379	8741	8741	8741	3242	7447	3242	6554	6037	7753	7157	4789	7781

5583	7753	7157	7753	7781	3242	2077	8741	4830	6037	9379	9379	8088

$2946 + 4501 = \square \rightarrow \text{W}$	$3980 + 2057 = \square \rightarrow \text{R}$	$5460 + 2628 = \square \rightarrow \text{N}$
$5796 + 2945 = \square \rightarrow \text{S}$	$4915 + 2866 = \square \rightarrow \text{T}$	$713 + 1364 = \square \rightarrow \text{L}$
$2713 + 3841 = \square \rightarrow \text{B}$	$2610 + 2220 = \square \rightarrow \text{C}$	$1785 + 3004 = \square \rightarrow \text{H}$
$4002 + 3751 = \square \rightarrow \text{I}$	$2721 + 4436 = \square \rightarrow \text{G}$	$1903 + 1339 = \square \rightarrow \text{A}$
$5642 + 3737 = \square \rightarrow \text{E}$	$2115 + 3468 = \square \rightarrow \text{D}$	

Scratch space:

CLUE 3
Subtraction

We calculate missing battery cells by subtracting remaining stock from original inventory.

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

A								A							
5570	4429	1822	1045	1045	3245	1045	1822	5570	1495	8132	4138	6462	2905	1045	1561

1561	6462	2905	5082	4869	4455	1045	8132	4897	8132	8780	1045	4392	4869

$8884 - 3314 = \square \rightarrow \text{A}$

$4665 - 1760 = \square \rightarrow \text{W}$

$7062 - 2924 = \square \rightarrow \text{L}$

$11036 - 4574 = \square \rightarrow \text{O}$

$5596 - 3774 = \square \rightarrow \text{R}$

$4766 - 311 = \square \rightarrow \text{H}$

$8922 - 4025 = \square \rightarrow \text{U}$

$9975 - 1843 = \square \rightarrow \text{S}$

$11669 - 2889 = \square \rightarrow \text{P}$

$9619 - 4537 = \square \rightarrow \text{N}$

$8195 - 3326 = \square \rightarrow \text{T}$

$2019 - 524 = \square \rightarrow \text{Y}$

$5368 - 939 = \square \rightarrow \text{F}$

$2592 - 1547 = \square \rightarrow \text{E}$

$3118 - 1557 = \square \rightarrow \text{D}$

$6154 - 1762 = \square \rightarrow \text{C}$

$7719 - 4474 = \square \rightarrow \text{Z}$

Scratch space:

CLUE 4
Multiplication facts (1-12)

Mechanics inspect equal rows of storage crates holding extra server modules.

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

T									T				T						
28	144	21	1	72	1	60	21	64	28	5	21	14	28	30	21	144	11	16	18
1	11	5	121	21	77	64	25	30	5	21	1								

$7 \times 4 = \square \rightarrow$ T	$8 \times 8 = \square \rightarrow$ C	$7 \times 2 = \square \rightarrow$ F	$7 \times 11 = \square \rightarrow$ R
$2 \times 9 = \square \rightarrow$ D	$10 \times 3 = \square \rightarrow$ B	$12 \times 12 = \square \rightarrow$ H	
$2 \times 8 = \square \rightarrow$ N	$5 \times 5 = \square \rightarrow$ A	$9 \times 8 = \square \rightarrow$ U	$1 \times 1 = \square \rightarrow$ S
$3 \times 7 = \square \rightarrow$ E	$12 \times 5 = \square \rightarrow$ P	$11 \times 1 = \square \rightarrow$ I	
$11 \times 11 = \square \rightarrow$ V	$5 \times 1 = \square \rightarrow$ L		

Scratch space:

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

The maintenance squad splits spare microprocessors evenly among repair droids.

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:

$21 \div 3 = \boxed{}$

$12 \div 6 = \boxed{}$

$100 \div 10 = \boxed{}$

$110 \div 10 = \boxed{}$

$10 \div 2 = \boxed{}$

$64 \div 8 = \boxed{}$

$36 \div 4 = \boxed{}$

$24 \div 6 = \boxed{}$

$132 \div 11 = \boxed{}$

$6 \div 6 = \boxed{}$

$15 \div 5 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain ignites the rocket boost, then sparks the welder torch.
2. The villain deploys the plasma shield, then aligns the radar dish.
3. The villain deploys the plasma shield, then sparks the welder torch.
4. The villain ignites the rocket boost, then charges the solar panel.
5. The villain extends the grapple arm, then aligns the radar dish.
6. The villain extends the grapple arm, then squirts the oil injector.
7. The villain deploys the plasma shield, then activates the micro scanner.
8. The villain ignites the rocket boost, then aligns the radar dish.
9. The villain extends the grapple arm, then sparks the welder torch.
10. The villain extends the grapple arm, then charges the solar panel.
11. The villain deploys the plasma shield, then squirts the oil injector.
12. The villain fires the laser cutter, then squirts the oil injector.

Answer Key

The Gearopolis CPU Caper

Culprit: Volt Wire

Grapple Arm · Oil Injector · Digital Screen · Silver Cables · Freeze Ray

Trail: Start 21 → Clue 1 15 → Clue 2 8 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE ROGUE BOT DOES NOT USE A WELDER TORCH"

Round 114 to the nearest ten = 110 (T) · Round 540 to the nearest hundred = 500 (A) · Round 1,251 to the nearest hundred = 1300 (W) · Round 3,480 to the nearest thousand = 3000 (E) · Round 89 to the nearest ten = 90 (O) · Round 154 to the nearest hundred = 200 (N) · Round 333 to the nearest hundred = 300 (U) · Round 34 to the nearest ten = 30 (D) · Round 6,526 to the nearest thousand = 7000 (C) · Round 8,563 to the nearest thousand = 9000 (L) · Round 4,273 to the nearest hundred = 4300 (G) · Round 70 to the nearest ten = 70 (B) · Round 131 to the nearest ten = 130 (H) · Round 366 to the nearest ten = 370 (S) · Round 3,705 to the nearest hundred = 3700 (R)

Clue 2 (Addition): "WITNESS SAW A BRIGHT DIGITAL SCREEN"

$2946 + 4501 = 7447$ (W) · $3980 + 2057 = 6037$ (R) · $5460 + 2628 = 8088$ (N) · $5796 + 2945 = 8741$ (S) · $4915 + 2866 = 7781$ (T) · $713 + 1364 = 2077$ (L) · $2713 + 3841 = 6554$ (B) · $2610 + 2220 = 4830$ (C) · $1785 + 3004 = 4789$ (H) · $4002 + 3751 = 7753$ (I) · $2721 + 4436 = 7157$ (G) · $1903 + 1339 = 3242$ (A) · $5642 + 3737 = 9379$ (E) · $2115 + 3468 = 5583$ (D)

Clue 3 (Subtraction): "A FREEZE RAY SLOWED DOWN THE SUSPECT"

$8884 - 3314 = 5570$ (A) · $4665 - 1760 = 2905$ (W) · $7062 - 2924 = 4138$ (L) · $11036 - 4574 = 6462$ (O) · $5596 - 3774 = 1822$ (R) · $4766 - 311 = 4455$ (H) · $8922 - 4025 = 4897$ (U) · $9975 - 1843 = 8132$ (S) · $11669 - 2889 = 8780$ (P) · $9619 - 4537 = 5082$ (N) · $8195 - 3326 = 4869$ (T) · $2019 - 524 = 1495$ (Y) · $5368 - 939 = 4429$ (F) · $2592 - 1547 = 1045$ (E) · $3118 - 1557 = 1561$ (D) · $6154 - 1762 = 4392$ (C) · $7719 - 4474 = 3245$ (Z)

Clue 4 (Multiplication facts (1-12)): "THE SUSPECT LEFT BEHIND SILVER CABLES"

$7 \times 4 = 28$ (T) · $8 \times 8 = 64$ (C) · $7 \times 2 = 14$ (F) · $7 \times 11 = 77$ (R) · $2 \times 9 = 18$ (D) · $10 \times 3 = 30$ (B) · $12 \times 12 = 144$ (H) · $2 \times 8 = 16$ (N) · $5 \times 5 = 25$ (A) · $9 \times 8 = 72$ (U) · $1 \times 1 = 1$ (S) · $3 \times 7 = 21$ (E) · $12 \times 5 = 60$ (P) · $11 \times 1 = 11$ (I) · $11 \times 11 = 121$ (V) · $5 \times 1 = 5$ (L)

Clue 5 (Division facts (1-12)): surviving statement is box 6 → Volt Wire

$21 \div 3 = 7$ · $12 \div 6 = 2$ · $100 \div 10 = 10$ · $110 \div 10 = 11$ · $10 \div 2 = 5$ · $64 \div 8 = 8$ · $36 \div 4 = 9$ · $24 \div 6 = 4$ · $132 \div 11 = 12$ · $6 \div 6 = 1$ · $15 \div 5 = 3$