



The Grand Championship Glitch

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

Detective: _____ **Date:** _____

The Grand PvP Tournament was down to the final match. Suddenly, a mysterious rogue hacker crashed the server, locked the Arena Champion out of their account, and stole the legendary Golden Trophy Item! As the lead system admin, you must analyze the match logs and catch the hacker before they escape the digital lobby.

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 Hacker is _____

Possible suspects

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

NAME	CLASS	OFFHAND GEAR	MOUSE GRIP	AVATAR HAIR	IN-GAME COUNTER
Rioter	Tech Sniper	Plasma Shield	Claw Grip	Neon Blue	Lag Spike
Viper	Shadow Monk	Healing Potion	Palm Grip	Spicy Orange	Flashbang
Spike	Swift Rogue	Plasma Shield	Palm Grip	Spicy Orange	Lag Spike
Shroud	Iron Knight	Smoke Bomb	Claw Grip	Spicy Orange	Lag Spike
Slayer	Iron Knight	Echo Boots	Palm Grip	Spicy Orange	Lag Spike
Gizmo	Shadow Monk	Smoke Bomb	Palm Grip	Spicy Orange	Lag Spike
Ninja	Tech Sniper	Healing Potion	Claw Grip	Glitch Purple	Flashbang
Glitch	Shadow Monk	Grapple Hook	Palm Grip	Glitch Purple	Lag Spike
Shadow	Shadow Monk	Smoke Bomb	Claw Grip	Spicy Orange	Flashbang
Retro	Shadow Monk	Echo Boots	Claw Grip	Spicy Orange	Flashbang
Pixel	Iron Knight	Healing Potion	Claw Grip	Spicy Orange	Lag Spike
Frost	Tech Sniper	Plasma Shield	Palm Grip	Spicy Orange	Lag Spike
Dexter	Swift Rogue	Plasma Shield	Claw Grip	Spicy Orange	Flashbang
Nova	Iron Knight	Healing Potion	Palm Grip	Spicy Orange	Lag Spike
Bugha	Shadow Monk	Smoke Bomb	Claw Grip	Neon Blue	Flashbang
Specter	Pyro Mage	Echo Boots	Claw Grip	Glitch Purple	Water Hazard
Raptor	Iron Knight	Grapple Hook	Claw Grip	Spicy Orange	Lag Spike
Matrix	Tech Sniper	Smoke Bomb	Palm Grip	Glitch Purple	Flashbang
Echo	Iron Knight	Echo Boots	Palm Grip	Glitch Purple	Water Hazard
Cypher	Iron Knight	Plasma Shield	Palm Grip	Neon Blue	Lag Spike
Turbo	Shadow Monk	Plasma Shield	Claw Grip	Spicy Orange	Lag Spike

CLUE 1

Subtraction

To unlock the server logs we had to subtract the corrupted data packets from the total system memory

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

T																	T
6836	7189	2020	6335	5150	2864	2864	7770	5150	5626	7759	1296	2020	5783	5626	1296	6836	

									T	
1187	5783	2020	2020	1930	7189	1296	3548	1296	1296	6836

$8427 - 1591 = \boxed{} \rightarrow \boxed{T}$

$6973 - 638 = \boxed{} \rightarrow \boxed{V}$

$8671 - 912 = \boxed{} \rightarrow \boxed{D}$

$2163 - 867 = \boxed{} \rightarrow \boxed{O}$

$3987 - 2800 = \boxed{} \rightarrow \boxed{U}$

$2486 - 466 = \boxed{} \rightarrow \boxed{E}$

$9558 - 3932 = \boxed{} \rightarrow \boxed{N}$

$9656 - 4506 = \boxed{} \rightarrow \boxed{I}$

$7817 - 4269 = \boxed{} \rightarrow \boxed{B}$

$6158 - 375 = \boxed{} \rightarrow \boxed{S}$

$9919 - 2730 = \boxed{} \rightarrow \boxed{H}$

$11601 - 3831 = \boxed{} \rightarrow \boxed{A}$

$3352 - 1422 = \boxed{} \rightarrow \boxed{C}$

$3251 - 387 = \boxed{} \rightarrow \boxed{L}$

Scratch space:

CLUE 2
Fractions of a number

The admin portal requires authorization from a fraction of the total moderator council members online

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

T																		
26	9	40	2	11	17	20	40	10	2	10	40	16	40	10	14	17		
						T												
13	8	35	16	8	10	26	17	37	11	40	2	17	11	35	32	10	23	2

$2/8 \text{ of } 104 = \boxed{} \rightarrow \boxed{\text{T}}$

$2/6 \text{ of } 39 = \boxed{} \rightarrow \boxed{\text{C}}$

$3/6 \text{ of } 74 = \boxed{} \rightarrow \boxed{\text{B}}$

$2/4 \text{ of } 46 = \boxed{} \rightarrow \boxed{\text{I}}$

$1/8 \text{ of } 136 = \boxed{} \rightarrow \boxed{\text{A}}$

$2/5 \text{ of } 20 = \boxed{} \rightarrow \boxed{\text{O}}$

$1/3 \text{ of } 48 = \boxed{} \rightarrow \boxed{\text{F}}$

$4/8 \text{ of } 70 = \boxed{} \rightarrow \boxed{\text{M}}$

$5/6 \text{ of } 24 = \boxed{} \rightarrow \boxed{\text{Y}}$

$4/6 \text{ of } 21 = \boxed{} \rightarrow \boxed{\text{S}}$

$1/4 \text{ of } 8 = \boxed{} \rightarrow \boxed{\text{P}}$

$2/10 \text{ of } 55 = \boxed{} \rightarrow \boxed{\text{L}}$

$1/8 \text{ of } 72 = \boxed{} \rightarrow \boxed{\text{H}}$

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

$1/4 \text{ of } 160 = \boxed{} \rightarrow \boxed{\text{E}}$

$3/6 \text{ of } 64 = \boxed{} \rightarrow \boxed{\text{G}}$

Scratch space:

CLUE 3 Addition

We tallied the total number of ping signals from the local game hubs to pinpoint the hackers server rack

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

T																		
5557	2255	8673	6808	2652	8673	6808	8834	8673	8673	6575	8673	9734	3698	6879	8834	3963	5326	7496

3286	9734	6879	3698	3698	8673	5326	5982	3286	7496	9734	4455	3963	8655	8673

$$2320 + 3237 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$1857 + 4125 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$1294 + 2669 = \boxed{} \rightarrow \boxed{\text{I}}$$

$$1638 + 3688 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$1663 + 989 = \boxed{} \rightarrow \boxed{\text{O}}$$

$$2536 + 4272 = \boxed{} \rightarrow \boxed{\text{F}}$$

$$2297 + 1401 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$5179 + 3476 = \boxed{} \rightarrow \boxed{\text{K}}$$

$$6458 + 3276 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$4260 + 2315 = \boxed{} \rightarrow \boxed{\text{Z}}$$

$$2007 + 1279 = \boxed{} \rightarrow \boxed{\text{A}}$$

$$3005 + 5829 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$2839 + 4657 = \boxed{} \rightarrow \boxed{\text{G}}$$

$$3836 + 3043 = \boxed{} \rightarrow \boxed{\text{U}}$$

$$1432 + 3023 = \boxed{} \rightarrow \boxed{\text{P}}$$

$$902 + 1353 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$4183 + 4490 = \boxed{} \rightarrow \boxed{\text{E}}$$

Scratch space:

CLUE 4 Place value

The hacker left an encrypted IP address where we had to determine the exact value of the digit in the tens place

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

W																		
40	3000	500	6000	9000	2000	20	7000	600	60	400	90	6000	700	8000	2000	80	3000	
7000	200	700	8000	2000	20	7000	6000	2000	200	4000	3000	400	6000	2000	7000	6000	300	3000

What is the value of the 4 in 19,048? → **W**

What is the value of the 2 in 482,149? → **N**

What is the value of the 3 in 706,374? → **L**

What is the value of the 6 in 85,695? → **P**

What is the value of the 6 in 423,867? → **I**

What is the value of the 7 in 539,705? → **R**

What is the value of the 4 in 564,581? → **H**

What is the value of the 2 in 65,275? → **T**

What is the value of the 6 in 26,205? → **O**

What is the value of the 3 in 63,924? → **E**

What is the value of the 9 in 79,580? → **U**

What is the value of the 8 in 306,180? → **G**

What is the value of the 9 in 71,895? → **Y**

What is the value of the 7 in 637,060? → **S**

What is the value of the 4 in 58,469? → **C**

What is the value of the 8 in 38,399? → **A**

What is the value of the 2 in 66,929? → **D**

What is the value of the 5 in 20,540? → **F**

Scratch space:

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

To bypass the final security firewall we must calculate what fraction of the energy crystals remain in the arena power grid

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:

$1/2 \text{ of } 14 = \boxed{}$

$1/8 \text{ of } 72 = \boxed{}$

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

$1/3 \text{ of } 33 = \boxed{}$

$1/10 \text{ of } 50 = \boxed{}$

$1/10 \text{ of } 20 = \boxed{}$

$1/8 \text{ of } 80 = \boxed{}$

$2/6 \text{ of } 3 = \boxed{}$

$2/6 \text{ of } 9 = \boxed{}$

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

$5/10 \text{ of } 24 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain sniped the server power core from afar, then sped away silently wearing echo boots.
2. The villain launched a massive fireball barrage, then deflected the security bots with a plasma shield.
3. The villain launched a massive fireball barrage, then healed their corrupted code with a healing potion.
4. The villain stealthily backstabbed the champion, then escaped the lobby inside a thick smoke bomb.
5. The villain teleported through the firewall shadows, then healed their corrupted code with a healing potion.
6. The villain teleported through the firewall shadows, then escaped the lobby inside a thick smoke bomb.
7. The villain blocked the lobby doors with a heavy shield, then healed their corrupted code with a healing potion.
8. The villain sniped the server power core from afar, then deflected the security bots with a plasma shield.
9. The villain stealthily backstabbed the champion, then deflected the security bots with a plasma shield.
10. The villain launched a massive fireball barrage, then swung up to the rafters using a grapple hook.
11. The villain stealthily backstabbed the champion, then swung up to the rafters using a grapple hook.
12. The villain teleported through the firewall shadows, then sped away silently wearing echo boots.

Answer Key

The Grand Championship Glitch

Culprit: Gizmo

Shadow Monk · Smoke Bomb · Palm Grip · Spicy Orange · Lag Spike

Trail: Start 21 → Clue 1 17 → Clue 2 8 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Subtraction): "THE VILLAIN DOES NOT USE ECHO BOOTS"

$8427 - 1591 = 6836$ (T) · $6973 - 638 = 6335$ (V) · $8671 - 912 = 7759$ (D) · $2163 - 867 = 1296$ (O) · $3987 - 2800 = 1187$ (U) · $2486 - 466 = 2020$ (E) · $9558 - 3932 = 5626$ (N) · $9656 - 4506 = 5150$ (I) · $7817 - 4269 = 3548$ (B) · $6158 - 375 = 5783$ (S) · $9919 - 2730 = 7189$ (H) · $11601 - 3831 = 7770$ (A) · $3352 - 1422 = 1930$ (C) · $3251 - 387 = 2864$ (L)

Clue 2 (Fractions of a number): "THE PLAYER PREFERS A COMFORTABLE PALM GRIP"

$2/8$ of 104 = 26 (T) · $2/6$ of 39 = 13 (C) · $3/6$ of 74 = 37 (B) · $2/4$ of 46 = 23 (I) · $1/8$ of 136 = 17 (A) · $2/5$ of 20 = 8 (O) · $1/3$ of 48 = 16 (F) · $4/8$ of 70 = 35 (M) · $5/6$ of 24 = 20 (Y) · $4/6$ of 21 = 14 (S) · $1/4$ of 8 = 2 (P) · $2/10$ of 55 = 11 (L) · $1/8$ of 72 = 9 (H) · $4/6$ of 15 = 10 (R) · $1/4$ of 160 = 40 (E) · $3/6$ of 64 = 32 (G)

Clue 3 (Addition): "THE FOE FREEZES DURING A SUDDEN LAG SPIKE"

$2320 + 3237 = 5557$ (T) · $1857 + 4125 = 5982$ (L) · $1294 + 2669 = 3963$ (I) · $1638 + 3688 = 5326$ (N) · $1663 + 989 = 2652$ (O) · $2536 + 4272 = 6808$ (F) · $2297 + 1401 = 3698$ (D) · $5179 + 3476 = 8655$ (K) · $6458 + 3276 = 9734$ (S) · $4260 + 2315 = 6575$ (Z) · $2007 + 1279 = 3286$ (A) · $3005 + 5829 = 8834$ (R) · $2839 + 4657 = 7496$ (G) · $3836 + 3043 = 6879$ (U) · $1432 + 3023 = 4455$ (P) · $902 + 1353 = 2255$ (H) · $4183 + 4490 = 8673$ (E)

Clue 4 (Place value): "WE FOUND SPICY ORANGE STRANDS ON THE CONSOLE"

What is the value of the 4 in 19,048? = 40 (W) · What is the value of the 2 in 482,149? = 2000 (N) · What is the value of the 3 in 706,374? = 300 (L) · What is the value of the 6 in 85,695? = 600 (P) · What is the value of the 6 in 423,867? = 60 (I) · What is the value of the 7 in 539,705? = 700 (R) · What is the value of the 4 in 564,581? = 4000 (H) · What is the value of the 2 in 65,275? = 200 (T) · What is the value of the 6 in 26,205? = 6000 (O) · What is the value of the 3 in 63,924? = 3000 (E) · What is the value of the 9 in 79,580? = 9000 (U) · What is the value of the 8 in 306,180? = 80 (G) · What is the value of the 9 in 71,895? = 90 (Y) · What is the value of the 7 in 637,060? = 7000 (S) · What is the value of the 4 in 58,469? = 400 (C) · What is the value of the 8 in 38,399? = 8000 (A) · What is the value of the 2 in 66,929? = 20 (D) · What is the value of the 5 in 20,540? = 500 (F)

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

$1/2$ of 14 = 7 · $1/8$ of 72 = 9 · $2/8$ of 32 = 8 · $1/3$ of 33 = 11 · $1/10$ of 50 = 5 · $1/10$ of 20 = 2 · $1/8$ of 80 = 10 · $2/6$ of 3 = 1 · $2/6$ of 9 = 3 · $4/6$ of 6 = 4 · $5/10$ of 24 = 12