



The Glitched Lobby Incident

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

Detective: _____ Date: _____

A rogue boss has locked the server host out of the main developer panel! To restore the server and save our hard-earned items, we must decode the system alerts and figure out which legendary player has been glitched into the ultimate boss.

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 boss is _____

Possible suspects

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

NAME	ULTIMATE ATTACK	PASSIVE ABILITY	FIGHTING STANCE	HEAD ACCESSORY	COMBAT COUNTER
ObbyRunner	Ban Hammer Strike	Double Jump	Lefty Stance	Golden Dominus	Sling Shot
ServerKing	Ban Hammer Strike	Lava Trail	Righty Stance	Red Valkyrie Helm	Sword Slash
TycoonGuy	Acid Rain	Double Jump	Lefty Stance	Golden Dominus	Sword Slash
BloxyDev	Nuke Drop	Shield Bubble	Righty Stance	Golden Dominus	Sling Shot
Guest	Laser Barrage	Shield Bubble	Lefty Stance	Neon Hair	Sling Shot
LeahAshe	Laser Barrage	Speed Boost	Lefty Stance	Golden Dominus	Sword Slash
Tofuu	Laser Barrage	Lava Trail	Righty Stance	Golden Dominus	Sword Slash
Denis	Acid Rain	Speed Boost	Righty Stance	Red Valkyrie Helm	Freeze Ray
Preston	Acid Rain	Lava Trail	Righty Stance	Red Valkyrie Helm	Freeze Ray
InquisitorMaster	Ban Hammer Strike	Double Jump	Righty Stance	Golden Dominus	Sword Slash
GlitchBot	Nuke Drop	HP Regen	Lefty Stance	Neon Hair	Sling Shot
MeganPlays	Gravity Flip	Shield Bubble	Lefty Stance	Neon Hair	Freeze Ray
GamingWithKev	Laser Barrage	Lava Trail	Lefty Stance	Golden Dominus	Sling Shot
Albert	Laser Barrage	Double Jump	Lefty Stance	Golden Dominus	Sling Shot
Poke	Ban Hammer Strike	Speed Boost	Righty Stance	Red Valkyrie Helm	Sword Slash
Noob	Gravity Flip	Shield Bubble	Righty Stance	Red Valkyrie Helm	Sling Shot
KreekCraft	Gravity Flip	Speed Boost	Lefty Stance	Golden Dominus	Freeze Ray
Flamingo	Gravity Flip	Shield Bubble	Lefty Stance	Golden Dominus	Sling Shot
StarMaker	Ban Hammer Strike	Shield Bubble	Righty Stance	Neon Hair	Freeze Ray
Thinknoodles	Ban Hammer Strike	Double Jump	Lefty Stance	Red Valkyrie Helm	Sling Shot
Builderman	Ban Hammer Strike	Shield Bubble	Lefty Stance	Golden Dominus	Sling Shot

CLUE 1

We need to see how much HP the boss lost after the first team raid. We can subtract the remaining health from the starting health to crack this code.

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

Diagram illustrating the arrangement of boxes and the placement of 'T' markers:

Row 1: 3912, 8854, 1738, 2155, 6178, 2700, 2700, 8989, 6178, 1738, 2700, 2555, 6178, 3912, 8854, 7172, 6896, 1738

Row 2: 4163, 7172, 6896, 7172, 3912, 1201, 7172, 1970, 4163

The first 'T' is placed in the first box of Row 1 (3912). The second 'T' is placed in the fifth box of Row 2 (3912).

$$5026 - 1114 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$5330 - 2775 = \boxed{} \rightarrow \boxed{\text{N}}$$

$10800 - 3904 = \boxed{} \rightarrow \boxed{\text{V}}$

$$5644 - 3489 = \boxed{} \rightarrow \boxed{\text{B}}$$

$$5473 - 2773 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$9058 - 69 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$2533 - 1332 = \boxed{} \rightarrow \boxed{\text{R}}$$

10991 - 2137 = → **H**

$10997 - 3825 = \boxed{} \rightarrow \boxed{\text{A}}$

$$3174 - 1204 = \boxed{} \rightarrow \boxed{\text{I}}$$

$$7847 - 3684 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$2647 - 909 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$6258 - 80 = \boxed{} \rightarrow \boxed{0}$$

Scratch space:

CLUE 2 Addition

Let's calculate our total team damage by combining the basic attacks of all players. We will add up every single strike in the combat log.

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

T						T						T	T					
5411	6678	9849	7430	7796	8219	5411	2224	6678	9849	6033	8268	5411	5411	8268	2224	8522	8219	2218

										T						T
2224	7609	9186	8219	2322	7430	2337	4309	7609	9186	5411	6678	9849	7796	9849	2337	5411

$2847 + 2564 = \square \rightarrow \text{[T]}$	$848 + 1489 = \square \rightarrow \text{[F]}$	$5143 + 3379 = \square \rightarrow \text{[K]}$
$6183 + 3666 = \square \rightarrow \text{[E]}$	$3357 + 4252 = \square \rightarrow \text{[O]}$	$774 + 1444 = \square \rightarrow \text{[S]}$
$3761 + 4458 = \square \rightarrow \text{[I]}$	$5570 + 3616 = \square \rightarrow \text{[M]}$	$4087 + 3709 = \square \rightarrow \text{[L]}$
$2523 + 4155 = \square \rightarrow \text{[H]}$	$2213 + 2096 = \square \rightarrow \text{[R]}$	$3847 + 3583 = \square \rightarrow \text{[G]}$
$3398 + 4870 = \square \rightarrow \text{[A]}$	$2850 + 3183 = \square \rightarrow \text{[D]}$	$804 + 1420 = \square \rightarrow \text{[C]}$
$740 + 1582 = \square \rightarrow \text{[N]}$		

Scratch space:

CLUE 3 Place value

The admin console flashed a security code with a high number. To find the correct key, we must check the place value of the digits on our screen.

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

P		P															
60	3000	60	70	100	5000	1000	900	90	70	300	100	40	100	90	5000	900	4000
80	90	70	100	20	40	900	90	800	1000	40	100	3000	70				

What is the value of the 6 in 487,061? → **P**

What is the value of the 4 in 60,148? → **S**

What is the value of the 7 in 45,370? → **T**

What is the value of the 3 in 109,317? → **C**

What is the value of the 1 in 21,482? → **G**

What is the value of the 1 in 60,104? → **H**

What is the value of the 9 in 326,095? → **I**

What is the value of the 5 in 85,726? → **E**

What is the value of the 4 in 14,082? → **D**

What is the value of the 3 in 53,711? → **O**

What is the value of the 8 in 665,862? → **N**

What is the value of the 8 in 32,281? → **W**

What is the value of the 9 in 742,902? → **L**

What is the value of the 2 in 835,429? → **A**

Scratch space:

CLUE 4

Multiplication facts (1-12)

The boss spawned multiple waves of digital minions in a grid layout. We can find the total count of invaders if we multiply the rows by the columns.

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

A															
14	20	110	96	9	96	9	24	24	8	45	4	40	9		
									A						A
4	8	56	96	9	12	20	88	14	20	20	40	40	9	14	22
		A													
20	2	14	88	9											

$7 \times 2 = \square \rightarrow \boxed{\text{A}}$

$10 \times 2 = \square \rightarrow \boxed{\text{S}}$

$11 \times 2 = \square \rightarrow \boxed{\text{T}}$

$4 \times 1 = \square \rightarrow \boxed{\text{D}}$

$5 \times 9 = \square \rightarrow \boxed{\text{L}}$

$8 \times 12 = \square \rightarrow \boxed{\text{I}}$

$3 \times 3 = \square \rightarrow \boxed{\text{N}}$

$4 \times 2 = \square \rightarrow \boxed{\text{O}}$

$2 \times 1 = \square \rightarrow \boxed{\text{P}}$

$11 \times 8 = \square \rightarrow \boxed{\text{W}}$

$4 \times 10 = \square \rightarrow \boxed{\text{E}}$

$3 \times 4 = \square \rightarrow \boxed{\text{U}}$

$8 \times 3 = \square \rightarrow \boxed{\text{G}}$

$10 \times 11 = \square \rightarrow \boxed{\text{H}}$

$8 \times 7 = \square \rightarrow \boxed{\text{M}}$

Scratch space:

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

The boss went into a phase change once its health meter dropped. We need to find the correct fraction of its maximum shield capacity to disable it.

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:

$1/4 \text{ of } 28 = \boxed{}$

$3/8 \text{ of } 16 = \boxed{}$

$1/10 \text{ of } 110 = \boxed{}$

$2/5 \text{ of } 25 = \boxed{}$

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

$3/8 \text{ of } 24 = \boxed{}$

$1/3 \text{ of } 36 = \boxed{}$

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

$2/4 \text{ of } 8 = \boxed{}$

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

$6/10 \text{ of } 5 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain swings a giant pixelated ban hammer, then leaps into the sky with a double jump.
2. The villain switches the gravity upside down, then recovers lost health points.
3. The villain charges up a massive laser barrage, then zooms away with a speed boost.
4. The villain swings a giant pixelated ban hammer, then zooms away with a speed boost.
5. The villain swings a giant pixelated ban hammer, then recovers lost health points.
6. The villain charges up a massive laser barrage, then leaps into the sky with a double jump.
7. The villain switches the gravity upside down, then hides inside a glowing shield bubble.
8. The villain summons a storm of burning green acid rain, then recovers lost health points.
9. The villain summons a storm of burning green acid rain, then zooms away with a speed boost.
10. The villain summons a storm of burning green acid rain, then hides inside a glowing shield bubble.
11. The villain swings a giant pixelated ban hammer, then hides inside a glowing shield bubble.
12. The villain switches the gravity upside down, then zooms away with a speed boost.

Answer Key

The Glitched Lobby Incident

Culprit: ObbyRunner

Ban Hammer Strike · Double Jump · Lefty Stance · Golden Dominus · Sling Shot

Trail: Start 21 → Clue 1 17 → Clue 2 11 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Subtraction): "THE BOSS DOES NOT HAVE LAVA TRAIL"

$5026 - 1114 = 3912$ (T) · $5330 - 2775 = 2555$ (N) · $10800 - 3904 = 6896$ (V) · $5644 - 3489 = 2155$ (B) · $5473 - 2773 = 2700$ (S) · $9058 - 69 = 8989$ (D) · $2533 - 1332 = 1201$ (R) · $10991 - 2137 = 8854$ (H) · $10997 - 3825 = 7172$ (A) · $3174 - 1204 = 1970$ (I) · $7847 - 3684 = 4163$ (L) · $2647 - 909 = 1738$ (E) · $6258 - 80 = 6178$ (O)

Clue 2 (Addition): "THE GLITCHED ATTACK IS COMING FROM THE LEFT"

$2847 + 2564 = 5411$ (T) · $848 + 1489 = 2337$ (F) · $5143 + 3379 = 8522$ (K) · $6183 + 3666 = 9849$ (E) · $3357 + 4252 = 7609$ (O) · $774 + 1444 = 2218$ (S) · $3761 + 4458 = 8219$ (I) · $5570 + 3616 = 9186$ (M) · $4087 + 3709 = 7796$ (L) · $2523 + 4155 = 6678$ (H) · $2213 + 2096 = 4309$ (R) · $3847 + 3583 = 7430$ (G) · $3398 + 4870 = 8268$ (A) · $2850 + 3183 = 6033$ (D) · $804 + 1420 = 2224$ (C) · $740 + 1582 = 2322$ (N)

Clue 3 (Place value): "POP THE GLITCH SHIELD WITH A SLING SHOT"

What is the value of the 6 in 487,061? = 60 (P) · What is the value of the 4 in 60,148? = 40 (S) · What is the value of the 7 in 45,370? = 70 (T) · What is the value of the 3 in 109,317? = 300 (C) · What is the value of the 1 in 21,482? = 1000 (G) · What is the value of the 1 in 60,104? = 100 (H) · What is the value of the 9 in 326,095? = 90 (I) · What is the value of the 5 in 85,726? = 5000 (E) · What is the value of the 4 in 14,082? = 4000 (D) · What is the value of the 3 in 53,711? = 3000 (O) · What is the value of the 8 in 665,862? = 800 (N) · What is the value of the 8 in 32,281? = 80 (W) · What is the value of the 9 in 742,902? = 900 (L) · What is the value of the 2 in 835,429? = 20 (A)

Clue 4 (Multiplication facts (1-12)): "A SHINING GOLDEN DOMINUS WAS SEEN AT SPAWN"

$7 \times 2 = 14$ (A) · $10 \times 2 = 20$ (S) · $11 \times 2 = 22$ (T) · $4 \times 1 = 4$ (D) · $5 \times 9 = 45$ (L) · $8 \times 12 = 96$ (I) · $3 \times 3 = 9$ (N) · $4 \times 2 = 8$ (O) · $2 \times 1 = 2$ (P) · $11 \times 8 = 88$ (W) · $4 \times 10 = 40$ (E) · $3 \times 4 = 12$ (U) · $8 \times 3 = 24$ (G) · $10 \times 11 = 110$ (H) · $8 \times 7 = 56$ (M)

Clue 5 (Fractions of a number): surviving statement is box 1 → ObbyRunner

$\frac{1}{4}$ of 28 = 7 · $\frac{3}{8}$ of 16 = 6 · $\frac{1}{10}$ of 110 = 11 · $\frac{2}{5}$ of 25 = 10 · $\frac{1}{2}$ of 10 = 5 · $\frac{3}{8}$ of 24 = 9 · $\frac{1}{3}$ of 36 = 12 · $\frac{4}{5}$ of 10 = 8 · $\frac{2}{4}$ of 8 = 4 · $\frac{1}{4}$ of 8 = 2 · $\frac{6}{10}$ of 5 = 3