



The Mystery of the Griefed Server

Grade 6 math · Percentages, Exponents, Order of operations, Multiplication, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

An unknown rogue griefer has broken into the main lobby and destroyed the legendary spawn monument! The Server Admin is in despair. We must trace the blocks, analyze the redstone crumbs, and use our math crafting skills to find the culprit before the world file is permanently corrupted!

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 griefer is _____

Possible suspects

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

NAME	PRIMARY WEAPON	SURVIVAL SKILL	DOMINANT HAND	AVATAR HAIR	CRITICAL WEAKNESS
Shubble	Diamond Sword Dueling	Potion of Swiftness Splash	Left Handed	Neon Purple Hair	Lava Buckets
Notch	Elysian Elytra Flight	Golden Apple Regeneration	Right Handed	Neon Purple Hair	Lava Buckets
Skeppy	Elysian Elytra Flight	Ender Pearl Teleportation	Right Handed	Square Brown Hair	Lava Buckets
Grian	Redstone Wire Mastery	Golden Apple Regeneration	Left Handed	Neon Purple Hair	Milk Buckets
Steve	Enchanted Bow Sniping	Ender Pearl Teleportation	Right Handed	Orange Ponytail	Water Blocks
Jeb	Elysian Elytra Flight	Wither Skull Throwing	Left Handed	Square Brown Hair	Water Blocks
AntVenom	Redstone Wire Mastery	Potion of Swiftness Splash	Right Handed	Square Brown Hair	Water Blocks
Alex	Nether Portal Spawning	Ender Pearl Teleportation	Right Handed	Orange Ponytail	Lava Buckets
Cleo	Nether Portal Spawning	Invisibility Potion Sneaking	Right Handed	Neon Purple Hair	Lava Buckets
Jerome	Diamond Sword Dueling	Ender Pearl Teleportation	Right Handed	Square Brown Hair	Water Blocks
Gemini	Enchanted Bow Sniping	Golden Apple Regeneration	Right Handed	Square Brown Hair	Water Blocks
Etho	Elysian Elytra Flight	Potion of Swiftness Splash	Right Handed	Neon Purple Hair	Lava Buckets
BadBoyHalo	Elysian Elytra Flight	Invisibility Potion Sneaking	Right Handed	Neon Purple Hair	Milk Buckets
Dream	Elysian Elytra Flight	Invisibility Potion Sneaking	Left Handed	Square Brown Hair	Water Blocks
Preston	Enchanted Bow Sniping	Wither Skull Throwing	Left Handed	Square Brown Hair	Milk Buckets
Aphmau	Enchanted Bow Sniping	Invisibility Potion Sneaking	Right Handed	Neon Purple Hair	Lava Buckets
Beef	Redstone Wire Mastery	Ender Pearl Teleportation	Right Handed	Neon Purple Hair	Lava Buckets
Lizzie	Nether Portal Spawning	Potion of Swiftness Splash	Right Handed	Orange Ponytail	Lava Buckets
Mumbo	Diamond Sword Dueling	Ender Pearl Teleportation	Left Handed	Orange Ponytail	Milk Buckets
Stampy	Elysian Elytra Flight	Wither Skull Throwing	Right Handed	Orange Ponytail	Milk Buckets
Techno	Elysian Elytra Flight	Wither Skull Throwing	Left Handed	Neon Purple Hair	Lava Buckets

CLUE 1 Percentages

An observer notices that the villain's pickaxe durability has decreased. Calculate the remaining durability percentage of the tool to narrow down the suspects.

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

T															
44	33	28	10	5	20	20	2	5	37	33	2	24	37	12	
25	12	20	4	28	37	2	40	40	20	28	40	12	7	28	41

$20\% \text{ of } 220 = \square \rightarrow \boxed{\text{T}}$

$50\% \text{ of } 8 = \square \rightarrow \boxed{\text{D}}$

$25\% \text{ of } 160 = \square \rightarrow \boxed{\text{P}}$

$5\% \text{ of } 660 = \square \rightarrow \boxed{\text{H}}$

$20\% \text{ of } 185 = \square \rightarrow \boxed{\text{N}}$

$20\% \text{ of } 205 = \square \rightarrow \boxed{\text{R}}$

$10\% \text{ of } 20 = \square \rightarrow \boxed{\text{A}}$

$25\% \text{ of } 28 = \square \rightarrow \boxed{\text{W}}$

$10\% \text{ of } 280 = \square \rightarrow \boxed{\text{E}}$

$25\% \text{ of } 80 = \square \rightarrow \boxed{\text{L}}$

$25\% \text{ of } 20 = \square \rightarrow \boxed{\text{I}}$

$25\% \text{ of } 100 = \square \rightarrow \boxed{\text{G}}$

$25\% \text{ of } 40 = \square \rightarrow \boxed{\text{V}}$

$75\% \text{ of } 16 = \square \rightarrow \boxed{\text{O}}$

$10\% \text{ of } 240 = \square \rightarrow \boxed{\text{S}}$

Scratch space:

CLUE 2

A stack of slime blocks is multiplying exponentially in a redstone machine trap. Solve the exponent equation to see how many blocks spawned and unlock the next clue.

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

The diagram shows two rows of boxes, each representing a sequence of numbers. The top row has 14 boxes, and the bottom row has 10 boxes. Some boxes are shaded orange and contain the letter 'T'.

Top Row:

- Box 1: Shaded orange, contains 'T'. Below: 343
- Box 2: White. Below: 144
- Box 3: White. Below: 216
- Box 4: White. Below: 361
- Box 5: White. Below: 27
- Box 6: White. Below: 4
- Box 7: White. Below: 4
- Box 8: White. Below: 169
- Box 9: White. Below: 27
- Box 10: White. Below: 243
- Box 11: White. Below: 81
- Box 12: White. Below: 36
- Box 13: White. Below: 27
- Box 14: White. Below: 243
- Box 15: White. Below: 256
- Box 16: White. Below: 81
- Box 17: White. Below: 36
- Box 18: White. Below: 27
- Box 19: Shaded orange, contains 'T'. Below: 343
- Box 20: White. Below: 144

Bottom Row:

- Box 1: Shaded orange, contains 'T'. Below: 343
- Box 2: White. Below: 144
- Box 3: White. Below: 216
- Box 4: White. Below: 9
- Box 5: White. Below: 27
- Box 6: White. Below: 256
- Box 7: White. Below: 144
- Box 8: Shaded orange, contains 'T'. Below: 343
- Box 9: White. Below: 144
- Box 10: White. Below: 169
- Box 11: White. Below: 243
- Box 12: White. Below: 16

$$7^3 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$6^2 = \boxed{} \rightarrow \boxed{\mathbf{W}}$$

$$4^2 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$6^3 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$12^2 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$3^5 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$3^3 = \boxed{} \rightarrow \boxed{1}$$

$$19^2 = \boxed{} \rightarrow \boxed{\mathbf{V}}$$

$$3^2 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$9^2 = \boxed{} \rightarrow \boxed{\mathbf{S}}$$

$$2^8 = \boxed{} \rightarrow \boxed{\mathbf{G}}$$

$13^2 = \boxed{} \rightarrow \boxed{A}$

$2^2 = \boxed{} \rightarrow \boxed{\text{L}}$

Scratch space:

CLUE 3

Order of operations

The crafter block needs a precise sequence of materials to open. Solve the order of operations math puzzle to reveal the hidden hair sample left behind.

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

A		A		A										
37	31	37	14	37	63	34	76	20	45	33	64	44	31	31
				A										
9	45	19	45	37	33	33	13	45	19	60	45			

$8 \times 7 - 19 = \square \rightarrow \boxed{\text{A}}$

$2 + 3 \times 4 = \square \rightarrow \boxed{\text{V}}$

$9 \times 10 - 27 = \square \rightarrow \boxed{\text{B}}$

$61 + 5 \times 3 = \square \rightarrow \boxed{\text{C}}$

$4 \times 12 - 15 = \square \rightarrow \boxed{\text{T}}$

$5 \times 7 - 16 = \square \rightarrow \boxed{\text{F}}$

$3 + 4 \times 7 = \square \rightarrow \boxed{\text{L}}$

$32 + 3 \times 4 = \square \rightarrow \boxed{\text{I}}$

$28 + 6 \times 6 = \square \rightarrow \boxed{\text{W}}$

$5 \times 3 - 2 = \square \rightarrow \boxed{\text{H}}$

$10 \times 6 - 15 = \square \rightarrow \boxed{\text{E}}$

$7 \times 9 - 29 = \square \rightarrow \boxed{\text{U}}$

$5 \times 4 - 11 = \square \rightarrow \boxed{\text{D}}$

$6 \times 5 - 10 = \square \rightarrow \boxed{\text{K}}$

$11 \times 8 - 28 = \square \rightarrow \boxed{\text{O}}$

Scratch space:

CLUE 4
Multiplication facts (1-12)

We found rows of chests stacked in a giant warehouse grid. Multiply the columns of chests by the item stacks to count the stolen iron ingots and find a clue.

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

N			N																
40	45	9	40	49	80	1	49	20	45	42	99	132	1	77	99	14			
					N														
20	45	63	54	9	40	54	42	45	28	20	9	18	144						

$5 \times 8 = \square \rightarrow \boxed{\text{N}}$

$1 \times 1 = \square \rightarrow \boxed{\text{R}}$

$7 \times 4 = \square \rightarrow \boxed{\text{B}}$

$7 \times 9 = \square \rightarrow \boxed{\text{F}}$

$12 \times 11 = \square \rightarrow \boxed{\text{I}}$

$2 \times 9 = \square \rightarrow \boxed{\text{C}}$

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

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

$8 \times 10 = \square \rightarrow \boxed{\text{U}}$

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

$6 \times 9 = \square \rightarrow \boxed{\text{T}}$

$7 \times 11 = \square \rightarrow \boxed{\text{W}}$

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

$7 \times 7 = \square \rightarrow \boxed{\text{P}}$

$9 \times 11 = \square \rightarrow \boxed{\text{A}}$

$12 \times 12 = \square \rightarrow \boxed{\text{K}}$

$5 \times 4 = \square \rightarrow \boxed{\text{L}}$

Scratch space:

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

A group of helpful villagers wants to share their bread evenly. Divide the loaves among the villagers to solve their dispute and reveal the final clue.

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:

$36 \div 4 = \boxed{}$

$55 \div 5 = \boxed{}$

$30 \div 6 = \boxed{}$

$63 \div 9 = \boxed{}$

$72 \div 6 = \boxed{}$

$6 \div 6 = \boxed{}$

$72 \div 9 = \boxed{}$

$50 \div 5 = \boxed{}$

$6 \div 1 = \boxed{}$

$16 \div 8 = \boxed{}$

$36 \div 9 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain destroyed the redstone machine, then crafted a boat and sailed off.
2. The villain freed the ender dragon, then flew away with an elytra.
3. The villain destroyed the redstone machine, then flew away with an elytra.
4. The villain grieved the ancient temple, then splashed a potion of invisibility.
5. The villain grieved the ancient temple, then teleported away using an ender pearl.
6. The villain grieved the ancient temple, then fled through a nether portal.
7. The villain destroyed the redstone machine, then fled through a nether portal.
8. The villain stole all the netherite, then splashed a potion of invisibility.
9. The villain stole all the netherite, then crafted a boat and sailed off.
10. The villain stole all the netherite, then fled through a nether portal.
11. The villain mined out the diamond vault, then flew away with an elytra.
12. The villain freed the ender dragon, then crafted a boat and sailed off.

Answer Key

The Mystery of the Griefed Server

Culprit: Cleo

Nether Portal Spawning · Invisibility Potion Sneaking · Right Handed · Neon Purple Hair · Lava Buckets

Trail: Start 21 → Clue 1 18 → Clue 2 12 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Percentages): "THE VILLAIN HAS NO GOLDEN APPLE POWER"

20% of 220 = 44 (T) · 50% of 8 = 4 (D) · 25% of 160 = 40 (P) · 5% of 660 = 33 (H) · 20% of 185 = 37 (N) · 20% of 205 = 41 (R) · 10% of 20 = 2 (A) · 25% of 28 = 7 (W) · 10% of 280 = 28 (E) · 25% of 80 = 20 (L) · 25% of 20 = 5 (I) · 25% of 100 = 25 (G) · 25% of 40 = 10 (V) · 75% of 16 = 12 (O) · 10% of 240 = 24 (S)

Clue 2 (Exponents): "THE VILLAIN SWINGS WITH THE RIGHT HAND"

$7^3 = 343$ (T) · $6^2 = 36$ (W) · $4^2 = 16$ (D) · $6^3 = 216$ (E) · $12^2 = 144$ (H) · $3^5 = 243$ (N) · $3^3 = 27$ (I) · $19^2 = 361$ (V) · $3^2 = 9$ (R) · $9^2 = 81$ (S) · $2^8 = 256$ (G) · $13^2 = 169$ (A) · $2^2 = 4$ (L)

Clue 3 (Order of operations): "A LAVA BUCKET WILL DEFEAT THE FOE"

$8 \times 7 - 19 = 37$ (A) · $2 + 3 \times 4 = 14$ (V) · $9 \times 10 - 27 = 63$ (B) · $61 + 5 \times 3 = 76$ (C) · $4 \times 12 - 15 = 33$ (T) · $5 \times 7 - 16 = 19$ (F) · $3 + 4 \times 7 = 31$ (L) · $32 + 3 \times 4 = 44$ (I) · $28 + 6 \times 6 = 64$ (W) · $5 \times 3 - 2 = 13$ (H) · $10 \times 6 - 15 = 45$ (E) · $7 \times 9 - 29 = 34$ (U) · $5 \times 4 - 11 = 9$ (D) · $6 \times 5 - 10 = 20$ (K) · $11 \times 8 - 28 = 60$ (O)

Clue 4 (Multiplication facts (1-12)): "NEON PURPLE HAIR WAS LEFT ON THE BLOCK"

$5 \times 8 = 40$ (N) · $1 \times 1 = 1$ (R) · $7 \times 4 = 28$ (B) · $7 \times 9 = 63$ (F) · $12 \times 11 = 132$ (I) · $2 \times 9 = 18$ (C) · $2 \times 7 = 14$ (S) · $3 \times 3 = 9$ (O) · $8 \times 10 = 80$ (U) · $6 \times 7 = 42$ (H) · $6 \times 9 = 54$ (T) · $7 \times 11 = 77$ (W) · $9 \times 5 = 45$ (E) · $7 \times 7 = 49$ (P) · $9 \times 11 = 99$ (A) · $12 \times 12 = 144$ (K) · $5 \times 4 = 20$ (L)

Clue 5 (Division facts (1-12)): surviving statement is box 3 → Cleo

$36 \div 4 = 9$ · $55 \div 5 = 11$ · $30 \div 6 = 5$ · $63 \div 9 = 7$ · $72 \div 6 = 12$ · $6 \div 6 = 1$ · $72 \div 9 = 8$ · $50 \div 5 = 10$ · $6 \div 1 = 6$ · $16 \div 8 = 2$ · $36 \div 9 = 4$