The Case of the Corrupted Castle

Grade 5 math · Multiplication, Fractions of a number, Order of operations, Rounding, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

Someone hacked the main spawn castle on the Pixel Kingdom server and deleted the golden trophy vault! You must analyze the server logs and decode the evidence to catch the rogue player.

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 Griefing Glitch is _____

Possible suspects

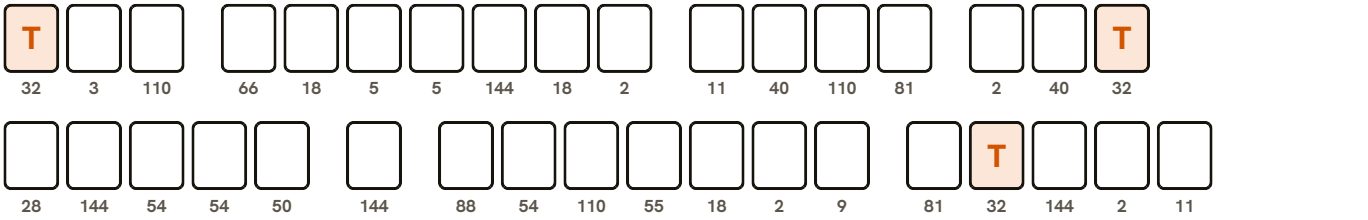
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	PRIMARY TOOL	OFFHAND ITEM	PLAY STYLE	HELMET STYLE	BAN VULNERABILITY
SmallishBeans	REDSTONE TORCH	ENCHANTED SHIELD	RIGHT HAND LEADING	IRON HELMET	MUSIC DISC
Alex Pixel	REDSTONE TORCH	BREWING STAND	RIGHT HAND LEADING	IRON HELMET	MUSIC DISC
Keralis	NETHERITE SWORD	SPYGLASS	LEFT HAND LEADING	IRON HELMET	MUSIC DISC
FalseSymmetry	DIAMOND PICKAXE	SPYGLASS	RIGHT HAND LEADING	IRON HELMET	MUSIC DISC
Steve Craft	GOLDEN SHOVEL	SPYGLASS	LEFT HAND LEADING	LEATHER CAP	WATER BUCKET
Mumbo Redstone	REDSTONE TORCH	TOTEM OF UNDYING	LEFT HAND LEADING	TURTLE HELMET	CAT TAMING
Grian Build	REDSTONE TORCH	BREWING STAND	LEFT HAND LEADING	TURTLE HELMET	MUSIC DISC
Rendog	DIAMOND PICKAXE	GLOW BERRIES	LEFT HAND LEADING	LEATHER CAP	WATER BUCKET
ImpulseSV	NETHERITE SWORD	BREWING STAND	RIGHT HAND LEADING	IRON HELMET	WATER BUCKET
DanTDM	GOLDEN SHOVEL	SPYGLASS	RIGHT HAND LEADING	LEATHER CAP	WATER BUCKET
LDShadowLady	NETHERITE SWORD	TOTEM OF UNDYING	RIGHT HAND LEADING	IRON HELMET	MUSIC DISC
Cubfan135	DIAMOND PICKAXE	ENCHANTED SHIELD	LEFT HAND LEADING	LEATHER CAP	MUSIC DISC
EthosLab	GOLDEN SHOVEL	BREWING STAND	LEFT HAND LEADING	TURTLE HELMET	WATER BUCKET
Xisumavoid	GOLDEN SHOVEL	ENCHANTED SHIELD	RIGHT HAND LEADING	IRON HELMET	MUSIC DISC
GeminiTay	GOLDEN SHOVEL	TOTEM OF UNDYING	RIGHT HAND LEADING	TURTLE HELMET	MUSIC DISC
VintageBeef	FIREWORK ROCKET	TOTEM OF UNDYING	LEFT HAND LEADING	IRON HELMET	MUSIC DISC
TangoTek	REDSTONE TORCH	BREWING STAND	LEFT HAND LEADING	IRON HELMET	CAT TAMING
BDoubleO100	GOLDEN SHOVEL	SPYGLASS	LEFT HAND LEADING	IRON HELMET	CAT TAMING
GoodTimesWithScar	NETHERITE SWORD	SPYGLASS	LEFT HAND LEADING	TURTLE HELMET	WATER BUCKET
CaptainSparklez	GOLDEN SHOVEL	SPYGLASS	RIGHT HAND LEADING	LEATHER CAP	CAT TAMING
PearlescentMoon	FIREWORK ROCKET	ENCHANTED SHIELD	RIGHT HAND LEADING	IRON HELMET	WATER BUCKET

CLUE 1 Multiplication facts (1-12)

You calculate total block counts in suspect inventory stacks to reveal a hidden code fragment.

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



8 × 4 = ☐ → T

7 × 4 = ☐ → C

3 × 3 = ☐ → G

6 × 11 = ☐ → V

8 × 5 = ☐ → O

10 × 11 = ☐ → E

3 × 1 = ☐ → H

11 × 1 = ☐ → D

6 × 3 = ☐ → I

5 × 1 = ☐ → L

11 × 5 = ☐ → W

11 × 8 = ☐ → B

2 × 1 = ☐ → N

12 × 12 = ☐ → A

9 × 6 = ☐ → R

10 × 5 = ☐ → Y

9 × 9 = ☐ → S

Scratch space:

CLUE 2

Fractions of a number

You inspect a chest full of raw ores and calculate the portion corrupted by the glitch.

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

T																	T	T		
12	24	17	30	33	16	17	21	17	33	39	9	19	19	25	11		12	12	17	7

					T							T				
32	19	16	15	30	12	24	17	33	16	30	24	12	24	9	15	7

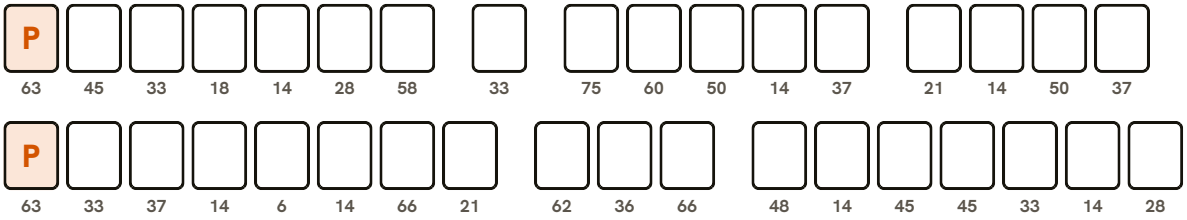
- 6/10 of 20 = ____ → T
- 1/8 of 200 = ____ → P
- 3/5 of 50 = ____ → G
- 2/6 of 48 = ____ → I
- 1/3 of 51 = ____ → E
- 2/4 of 78 = ____ → W
- 2/6 of 21 = ____ → D
- 2/10 of 55 = ____ → O
- 2/10 of 75 = ____ → N
- 6/8 of 28 = ____ → F
- 4/8 of 64 = ____ → U
- 3/6 of 18 = ____ → A
- 4/8 of 66 = ____ → R
- 4/8 of 38 = ____ → S
- 6/8 of 32 = ____ → H

Scratch space:

CLUE 3 Order of operations

> To decrypt the server log, you evaluate a complex crafting recipe code sequence.

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



7 + 7 × 8 = ☐ → P

5 + 3 × 3 = ☐ → I

6 × 7 - 9 = ☐ → A

2 + 2 × 2 = ☐ → F

8 × 9 - 14 = ☐ → G

8 × 12 - 30 = ☐ → E

8 + 6 × 7 = ☐ → S

8 × 6 - 3 = ☐ → L

7 × 10 - 8 = ☐ → T

6 × 12 - 24 = ☐ → V

17 + 5 × 4 = ☐ → C

3 + 9 × 2 = ☐ → D

43 + 8 × 4 = ☐ → M

3 × 11 - 5 = ☐ → N

6 + 3 × 4 = ☐ → Y

5 × 12 - 24 = ☐ → H

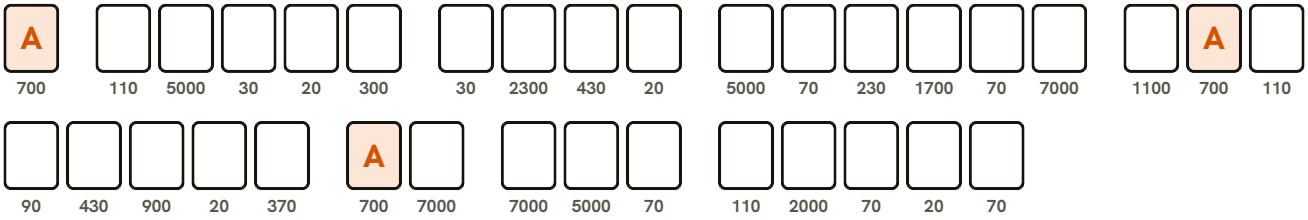
8 × 11 - 28 = ☐ → U

Scratch space:

CLUE 4 Rounding

The server radar displays player distances rounded to the nearest ten blocks.

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



Round 700 to the nearest hundred ☐ → A

Round 927 to the nearest hundred ☐ → U

Round 233 to the nearest ten ☐ → L

Round 87 to the nearest ten ☐ → F

Round 1,145 to the nearest hundred ☐ → W

Round 367 to the nearest ten ☐ → D

Round 1,682 to the nearest hundred ☐ → M

Round 23 to the nearest ten ☐ → N

Round 346 to the nearest hundred ☐ → Y

Round 4,767 to the nearest thousand ☐ → H

Round 6,546 to the nearest thousand ☐ → T

Round 26 to the nearest ten ☐ → I

Round 427 to the nearest ten ☐ → O

Round 1,681 to the nearest thousand ☐ → C

Round 74 to the nearest ten ☐ → E

Round 2,257 to the nearest hundred ☐ → R

Round 109 to the nearest ten ☐ → S

Scratch space:

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

> You divide the lost server experience points equally among spawn zones to isolate the source.

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:

24 ÷ 2 = ☐	20 ÷ 4 = ☐	9 ÷ 3 = ☐	5 ÷ 5 = ☐	55 ÷ 5 = ☐
54 ÷ 9 = ☐	48 ÷ 6 = ☐	48 ÷ 12 = ☐	54 ÷ 6 = ☐	70 ÷ 10 = ☐
18 ÷ 9 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain boosted across the server moat, then cheated death with a totem.
2. The villain dug up the hidden floor, then scanned the area with a spyglass.
3. The villain dug up the hidden floor, then blocked attacks with a shield.
4. The villain slashed open the vault door, then blocked attacks with a shield.
5. The villain mined through the bedrock wall, then scanned the area with a spyglass.
6. The villain powered the TNT cannon, then cheated death with a totem.
7. The villain mined through the bedrock wall, then dropped glow berries everywhere.
8. The villain mined through the bedrock wall, then cheated death with a totem.
9. The villain mined through the bedrock wall, then brewed a potion of speed.
10. The villain powered the TNT cannon, then blocked attacks with a shield.
11. The villain slashed open the vault door, then scanned the area with a spyglass.
12. The villain slashed open the vault door, then cheated death with a totem.

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TEACHER / PARENT

Answer Key

The Case of the Corrupted Castle

Culprit: SmallishBeans

REDSTONE TORCH · ENCHANTED SHIELD · RIGHT HAND LEADING · IRON HELMET · MUSIC DISC

Trail: Start 21 → Clue 1 16 → Clue 2 8 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DOES NOT CARRY A BREWING STAND"

8 × 4 = 32 (T) · 7 × 4 = 28 (C) · 3 × 3 = 9 (G) · 6 × 11 = 66 (V) · 8 × 5 = 40 (O) · 10 × 11 = 110 (E) · 3 × 1 = 3 (H) · 11 × 1 = 11 (D) · 6 × 3 = 18 (I) · 5 × 1 = 5 (L) · 11 × 5 = 55 (W) · 11 × 8 = 88 (B) · 2 × 1 = 2 (N) · 12 × 12 = 144 (A) · 9 × 6 = 54 (R) · 10 × 5 = 50 (Y) · 9 × 9 = 81 (S)

Clue 2 (Fractions of a number): "THE GRIEFER WAS SPOTTED USING THE RIGHT HAND"

6/10 of 20 = 12 (T) · 1/8 of 200 = 25 (P) · 3/5 of 50 = 30 (G) · 2/6 of 48 = 16 (I) · 1/3 of 51 = 17 (E) · 2/4 of 78 = 39 (W) · 2/6 of 21 = 7 (D) · 2/10 of 55 = 11 (O) · 2/10 of 75 = 15 (N) · 6/8 of 28 = 21 (F) · 4/8 of 64 = 32 (U) · 3/6 of 18 = 9 (A) · 4/8 of 66 = 33 (R) · 4/8 of 38 = 19 (S) · 6/8 of 32 = 24 (H)

Clue 3 (Order of operations): "PLAYING A MUSIC DISC PACIFIED THE VILLAIN"

7 + 7 × 8 = 63 (P) · 5 + 3 × 3 = 14 (I) · 6 × 7 - 9 = 33 (A) · 2 + 2 × 2 = 6 (F) · 8 × 9 - 14 = 58 (G) · 8 × 12 - 30 = 66 (E) · 8 + 6 × 7 = 50 (S) · 8 × 6 - 3 = 45 (L) · 7 × 10 - 8 = 62 (T) · 6 × 12 - 24 = 48 (V) · 17 + 5 × 4 = 37 (C) · 3 + 9 × 2 = 21 (D) · 43 + 8 × 4 = 75 (M) · 3 × 11 - 5 = 28 (N) · 6 + 3 × 4 = 18 (Y) · 5 × 12 - 24 = 36 (H) · 8 × 11 - 28 = 60 (U)

Clue 4 (Rounding): "A SHINY IRON HELMET WAS FOUND AT THE SCENE"

Round 700 to the nearest hundred = 700 (A) · Round 927 to the nearest hundred = 900 (U) · Round 233 to the nearest ten = 230 (L) · Round 87 to the nearest ten = 90 (F) · Round 1,145 to the nearest hundred = 1100 (W) · Round 367 to the nearest ten = 370 (D) · Round 1,682 to the nearest hundred = 1700 (M) · Round 23 to the nearest ten = 20 (N) · Round 346 to the nearest hundred = 300 (Y) · Round 4,767 to the nearest thousand = 5000 (H) · Round 6,546 to the nearest thousand = 7000 (T) · Round 26 to the nearest ten = 30 (I) · Round 427 to the nearest ten = 430 (O) · Round 1,681 to the nearest thousand = 2000 (C) · Round 74 to the nearest ten = 70 (E) · Round 2,257 to the nearest hundred = 2300 (R) · Round 109 to the nearest ten = 110 (S)

Clue 5 (Division facts (1-12)): surviving statement is box 10 → SmallishBeans

24 ÷ 2 = 12 · 20 ÷ 4 = 5 · 9 ÷ 3 = 3 · 5 ÷ 5 = 1 · 55 ÷ 5 = 11 · 54 ÷ 9 = 6 · 48 ÷ 6 = 8 · 48 ÷ 12 = 4 · 54 ÷ 6 = 9 · 70 ÷ 10 = 7 · 18 ÷ 9 = 2