



The Phantom Griefer of Pixel Hills

Grade 6 math · Addition, Subtraction, Multiplication, Rounding, Missing addends · Reading level grades 5-6

Detective: _____ **Date:** _____

Someone logged onto the server last night and completely grieved the spawn castle! The Lead Server Builder discovered giant towers of cobblestone and missing diamond chests. We must track down the culprit before the whole world gets ruined.

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 Phantom is _____

Possible suspects

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

NAME	MOVEMENT SKILL	IN BATTLE ITEM	SHIELD PLACEMENT	SKIN HEADGEAR	SERVER COUNTERMEASURE
Joel	potion brewing	splash potions	left handed shield	creeper hood	snowball barrage
Techno	redstone wiring	golden apples	left handed shield	steve wig	snowball barrage
George	redstone wiring	golden apples	left handed shield	creeper hood	water bucket splash
BadBoyHalo	potion brewing	spectral arrows	left handed shield	netherite helm	milk bucket drink
DanTDM	ender pearling	totem of undying	left handed shield	creeper hood	snowball barrage
Mumbo	ender pearling	lava buckets	left handed shield	steve wig	water bucket splash
Wilbur	redstone wiring	golden apples	left handed shield	steve wig	water bucket splash
Lizzie	tnt blasting	totem of undying	left handed shield	netherite helm	snowball barrage
Dream	elytra gliding	golden apples	right handed shield	creeper hood	water bucket splash
Grian	redstone wiring	spectral arrows	left handed shield	steve wig	water bucket splash
Stampy	tnt blasting	totem of undying	left handed shield	creeper hood	milk bucket drink
Steve	redstone wiring	totem of undying	left handed shield	steve wig	water bucket splash
Philza	elytra gliding	totem of undying	left handed shield	steve wig	water bucket splash
Shubble	elytra gliding	totem of undying	right handed shield	steve wig	water bucket splash
CaptainSparklez	elytra gliding	lava buckets	right handed shield	netherite helm	milk bucket drink
Skeppy	elytra gliding	splash potions	right handed shield	steve wig	snowball barrage
Scar	ender pearling	totem of undying	right handed shield	netherite helm	milk bucket drink
Pearl	redstone wiring	spectral arrows	left handed shield	creeper hood	snowball barrage
Tubbo	potion brewing	splash potions	left handed shield	steve wig	milk bucket drink
Gemini	potion brewing	golden apples	right handed shield	creeper hood	water bucket splash
Alex	ender pearling	lava buckets	right handed shield	creeper hood	water bucket splash

CLUE 1

To track down the phantom, we must first count the blocks used to repair the ruined town square. Add up these repair piles to get our search coordinates.

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

8567 7737 7739 6219 6492 5913 5913 8630 6492 9693 2152 5043 7739 2619 9693 5043 8567

9410 8630 4467 4467 8435 5913 8630 6219 8630 3908 8616 9410 2626 7739 8567 2619

$$5641 + 2926 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$2632 + 5107 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$5004 + 2733 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$5708 + 2922 = \boxed{} \rightarrow \boxed{\text{A}}$$

$$5270 + 3346 = \boxed{} \rightarrow \boxed{\text{U}}$$

$$873 + 1746 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$1913 + 2554 = \boxed{} \rightarrow \boxed{\mathbf{R}}$$

$$4378 + 2114 = \boxed{} \rightarrow \boxed{\text{I}}$$

$$3117 + 2796 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$1208 + 1418 = \boxed{} \rightarrow \boxed{\text{K}}$$

$$808 + 1344 = \boxed{} \rightarrow \boxed{\mathbf{D}}$$

$$2123 + 2920 = \boxed{} \rightarrow \boxed{0}$$

$$2144 + 4075 = \boxed{} \rightarrow \boxed{\text{V}}$$

$$1319 + 2589 = \boxed{} \rightarrow \boxed{\mathbf{B}}$$

$$6508 + 3185 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$5123 + 3312 = \boxed{} \rightarrow \boxed{\text{Y}}$$

$$3410 + 6000 = \boxed{} \rightarrow \boxed{\text{C}}$$

Scratch space:

CLUE 2 Subtraction

The griever broke into the storage vault and stole a bunch of diamond armor. Subtract the remaining pieces from the starting total to see how much gear they took.

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

T																			T
1126	3382	6550	2550	6445	7371	6550	1972	6550	6445	3826	2143	6550	2143	2425	6991	6550	1972	1126	
3382	2425	2474	7857	6550	7857	2143	3382	7371	6550	6991	7857								

$$3698 - 2572 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$7445 - 74 = \boxed{} \rightarrow \boxed{\text{I}}$$

$$6920 - 3538 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$5384 - 2959 = \boxed{} \rightarrow \boxed{\text{A}}$$

$$6613 - 4139 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$10946 - 3955 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$9086 - 2536 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$9744 - 1887 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$6737 - 4765 = \boxed{} \rightarrow \boxed{\text{F}}$$

$$7814 - 3988 = \boxed{} \rightarrow \boxed{\text{U}}$$

$$8833 - 2388 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$4167 - 2024 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$6733 - 4183 = \boxed{} \rightarrow \boxed{\text{G}}$$

Scratch space:

CLUE 3

Multiplication facts (1-12)

We found a hidden base with rows of supply chests stacked perfectly in a grid. Multiply the rows by the chests in each row to count the total loot.

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

T										T									
120	4	81	144	15	81	66	1	110	110	120	15	54	54	81	80	96	90	1	
		T								T									
66	1	120	81	49	96	70	48	28	81	120									

$10 \times 12 = \square \rightarrow$ T	$9 \times 6 = \square \rightarrow$ P	$6 \times 8 = \square \rightarrow$ C
$10 \times 8 = \square \rightarrow$ D	$9 \times 9 = \square \rightarrow$ E	$11 \times 6 = \square \rightarrow$ W
$12 \times 12 = \square \rightarrow$ F	$12 \times 8 = \square \rightarrow$ B	$7 \times 7 = \square \rightarrow$ R
$1 \times 1 = \square \rightarrow$ A	$10 \times 11 = \square \rightarrow$ S	$7 \times 10 = \square \rightarrow$ U
$10 \times 9 = \square \rightarrow$ Y	$3 \times 5 = \square \rightarrow$ O	$4 \times 1 = \square \rightarrow$ H
		$7 \times 4 = \square \rightarrow$ K

Scratch space:

CLUE 4 Rounding

Our ancient debris radar is glitching and only shows rough estimates of nearby materials. Round these distance numbers to the nearest ten to pinpoint the signal.

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

W																	
20	3700	2900	1300	90	300	2300	110	30	4300	50	300	2300	110	1300	2900	50	

			W							W		
9000	4300	1300	20	300	110	30	3700	230	3700	20	1100	2000

Round 24 to the nearest ten → **W**

Round 1,963 to the nearest thousand → **G**

Round 27 to the nearest ten → **T**

Round 1,257 to the nearest hundred → **O**

Round 49 to the nearest ten → **A**

Round 4,325 to the nearest hundred → **R**

Round 3,662 to the nearest hundred → **E**

Round 88 to the nearest ten → **U**

Round 1,135 to the nearest hundred → **I**

Round 2,292 to the nearest hundred → **D**

Round 8,710 to the nearest thousand → **B**

Round 2,949 to the nearest hundred → **F**

Round 230 to the nearest ten → **V**

Round 299 to the nearest hundred → **N**

Round 113 to the nearest ten → **S**

Scratch space:

CLUE 5**Missing addends - the last clue**

The redstone bridge needs a specific total of repeaters to power up, but some are missing. Find the missing number of repeaters to activate the bridge.

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:

$31 + \underline{\quad} = 43$

$21 + \underline{\quad} = 23$

$23 + \underline{\quad} = 29$

$5 + \underline{\quad} = 14$

$6 + \underline{\quad} = 7$

$14 + \underline{\quad} = 17$

$30 + \underline{\quad} = 37$

$2 + \underline{\quad} = 10$

$20 + \underline{\quad} = 31$

$31 + \underline{\quad} = 36$

$6 + \underline{\quad} = 10$

Step 2 - cross out the sentence with each answer:

1. The villain teleports past walls using ender pearls, then survives fatal falls with a totem of undying.
2. The villain activates hidden redstone trapdoors, then survives fatal falls with a totem of undying.
3. The villain detonates block structures with tnt, then tags the running players with spectral arrows.
4. The villain splashes speed potions to escape, then tags the running players with spectral arrows.
5. The villain glides through the sky with an elytra, then heals back to full health with golden apples.
6. The villain glides through the sky with an elytra, then survives fatal falls with a totem of undying.
7. The villain splashes speed potions to escape, then survives fatal falls with a totem of undying.
8. The villain splashes speed potions to escape, then creates defensive walls using lava buckets.
9. The villain teleports past walls using ender pearls, then heals back to full health with golden apples.
10. The villain activates hidden redstone trapdoors, then tags the running players with spectral arrows.
11. The villain glides through the sky with an elytra, then blinds the server mods using splash potions.
12. The villain activates hidden redstone trapdoors, then heals back to full health with golden apples.

Answer Key

The Phantom Griever of Pixel Hills

Culprit: Grian

redstone wiring · spectral arrows · left handed shield · steve wig · water bucket splash

Trail: Start 21 → Clue 1 18 → Clue 2 13 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT CARRY LAVA BUCKETS"

$5641 + 2926 = 8567$ (T) · $2632 + 5107 = 7739$ (E) · $5004 + 2733 = 7737$ (H) · $5708 + 2922 = 8630$ (A) · $5270 + 3346 = 8616$ (U) · $873 + 1746 = 2619$ (S) · $1913 + 2554 = 4467$ (R) · $4378 + 2114 = 6492$ (I) · $3117 + 2796 = 5913$ (L) · $1208 + 1418 = 2626$ (K) · $808 + 1344 = 2152$ (D) · $2123 + 2920 = 5043$ (O) · $2144 + 4075 = 6219$ (V) · $1319 + 2589 = 3908$ (B) · $6508 + 3185 = 9693$ (N) · $5123 + 3312 = 8435$ (Y) · $3410 + 6000 = 9410$ (C)

Clue 2 (Subtraction): "THE GRIEFER USES A LEFT HANDED SHIELD"

$3698 - 2572 = 1126$ (T) · $7445 - 74 = 7371$ (I) · $6920 - 3538 = 3382$ (H) · $5384 - 2959 = 2425$ (A) · $6613 - 4139 = 2474$ (N) · $10946 - 3955 = 6991$ (L) · $9086 - 2536 = 6550$ (E) · $9744 - 1887 = 7857$ (D) · $6737 - 4765 = 1972$ (F) · $7814 - 3988 = 3826$ (U) · $8833 - 2388 = 6445$ (R) · $4167 - 2024 = 2143$ (S) · $6733 - 4183 = 2550$ (G)

Clue 3 (Multiplication facts (1-12)): "THE FOE WAS STOPPED BY A WATER BUCKET"

$10 \times 12 = 120$ (T) · $9 \times 6 = 54$ (P) · $6 \times 8 = 48$ (C) · $10 \times 8 = 80$ (D) · $9 \times 9 = 81$ (E) · $11 \times 6 = 66$ (W) · $12 \times 12 = 144$ (F) · $12 \times 8 = 96$ (B) · $7 \times 7 = 49$ (R) · $1 \times 1 = 1$ (A) · $10 \times 11 = 110$ (S) · $7 \times 10 = 70$ (U) · $10 \times 9 = 90$ (Y) · $3 \times 5 = 15$ (O) · $4 \times 1 = 4$ (H) · $7 \times 4 = 28$ (K)

Clue 4 (Rounding): "WE FOUND STRANDS OF A BROWN STEVE WIG"

Round 24 to the nearest ten = 20 (W) · Round 1,963 to the nearest thousand = 2000 (G) · Round 27 to the nearest ten = 30 (T) · Round 1,257 to the nearest hundred = 1300 (O) · Round 49 to the nearest ten = 50 (A) · Round 4,325 to the nearest hundred = 4300 (R) · Round 3,662 to the nearest hundred = 3700 (E) · Round 88 to the nearest ten = 90 (U) · Round 1,135 to the nearest hundred = 1100 (I) · Round 2,292 to the nearest hundred = 2300 (D) · Round 8,710 to the nearest thousand = 9000 (B) · Round 2,949 to the nearest hundred = 2900 (F) · Round 230 to the nearest ten = 230 (V) · Round 299 to the nearest hundred = 300 (N) · Round 113 to the nearest ten = 110 (S)

Clue 5 (Missing addends): surviving statement is box 10 → Grian

$31 + \underline{\quad} = 43 = 12$ · $21 + \underline{\quad} = 23 = 2$ · $23 + \underline{\quad} = 29 = 6$ · $5 + \underline{\quad} = 14 = 9$ · $6 + \underline{\quad} = 7 = 1$ · $14 + \underline{\quad} = 17 = 3$ · $30 + \underline{\quad} = 37 = 7$ · $2 + \underline{\quad} = 10 = 8$ · $20 + \underline{\quad} = 31 = 11$ · $31 + \underline{\quad} = 36 = 5$ · $6 + \underline{\quad} = 10 = 4$