



The Grief of Great Grid City

Grade 6 math · Multiplication, Fractions of a number, Word problems, Multi-step word problems, Division · Reading level grades 7-9

Detective: _____ Date: _____

The beacon at the center of Spawn has been deactivated! The bedrock vault was breached, and a trail of redstone dust leads straight into the dark chunks of the Overworld. As the Lead Moderator, you must track down the rogue player before they grief the entire server.

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 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	OFFHAND ITEM	MOVEMENT PATTERN	SKIN HAIR COLOR	IN-GAME WEAKNESS
Dream	Splash Potion	Shield	Sneak Walking	Steampunk Brown	Water Buckets
Techno	Splash Potion	Shield	Sneak Walking	Obsidian Black	Lava
Stampy	Netherite Sword	Firework Rocket	Strafe Jumping	Neon Green Dye	Lingering Potions
Alex	Netherite Sword	Ender Pearl	Strafe Jumping	Steampunk Brown	Lingering Potions
vintagebeef	Diamond Axe	Totem of Undying	Strafe Jumping	Steampunk Brown	Lingering Potions
Grian	Splash Potion	Ender Pearl	Sneak Walking	Neon Green Dye	Lava
Smallishbeans	Splash Potion	Totem of Undying	Sneak Walking	Obsidian Black	Lava
BdoubleO100	Trident	Ender Pearl	Strafe Jumping	Steampunk Brown	Water Buckets
ZombieCleo	Trident	Shield	Strafe Jumping	Steampunk Brown	Water Buckets
LDShadowLady	Netherite Sword	Ender Pearl	Sneak Walking	Obsidian Black	Water Buckets
Steve	Diamond Axe	Ender Pearl	Strafe Jumping	Obsidian Black	Lava
Mumbo	Enchanted Bow	Golden Apple	Sneak Walking	Steampunk Brown	Water Buckets
GoodTimesWithScar	Diamond Axe	Golden Apple	Strafe Jumping	Obsidian Black	Water Buckets
PearlescentMoon	Trident	Ender Pearl	Strafe Jumping	Steampunk Brown	Lava
EthosLab	Trident	Shield	Strafe Jumping	Neon Green Dye	Water Buckets
FalseSymmetry	Enchanted Bow	Shield	Strafe Jumping	Obsidian Black	Water Buckets
Keralis	Enchanted Bow	Firework Rocket	Strafe Jumping	Steampunk Brown	Water Buckets
docm77	Netherite Sword	Shield	Strafe Jumping	Neon Green Dye	Water Buckets
TangoTek	Diamond Axe	Firework Rocket	Strafe Jumping	Steampunk Brown	Water Buckets
iskall85	Trident	Golden Apple	Sneak Walking	Neon Green Dye	Water Buckets
DanTDM	Diamond Axe	Totem of Undying	Strafe Jumping	Steampunk Brown	Water Buckets

Multiplication facts (1-12)

You inspect the suspect's hidden chest room, where stacks of obsidian blocks are stored in neat rows. To calculate their total inventory weight, you need to multiply the rows of chests by the stacks inside.

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

T																T
54	27	45	132	99	28	28	35	99	50	81	24	45	6	50	24	54
110	6	45	35	50	45	50	81	45	88	11	45	35	88	28		

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

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

$$3 \times 2 = \boxed{} \rightarrow \boxed{\text{S}}$$

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

$10 \times 11 = \boxed{} \rightarrow \mathbf{U}$

$11 \times 8 = \boxed{} \rightarrow \boxed{\text{R}}$

$$2 \times 12 = \boxed{} \rightarrow \boxed{0}$$

$7 \times 5 = \boxed{} \rightarrow \boxed{\text{A}}$

$$12 \times 11 = \boxed{} \rightarrow \boxed{\mathbf{v}}$$

$$9 \times 3 = \boxed{} \rightarrow \boxed{\text{H}}$$

$11 \times 1 = \boxed{} \rightarrow \boxed{\text{P}}$

$10 \times 5 = \boxed{} \rightarrow \boxed{\mathbf{N}}$

$9 \times 9 = \boxed{} \rightarrow \boxed{\text{D}}$

$11 \times 9 =$ $\rightarrow$

Scratch space:

Fractions of a number

A damaged diamond pickaxe was left behind in a furnace hopper. By calculating what fraction of its durability remains from the raw data, you can narrow down how long the culprit was mining.

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

The diagram consists of two rows of boxes, each with a number below it. The top row has 15 boxes, and the bottom row has 13 boxes. Some boxes are shaded orange and contain the letter 'T', indicating they are 'true' or 'active'.

Top Row:

T								T						
36	22	33	32	26	32	9	33	38	36	20	2	32	32	9

Bottom Row:

	T											
32	36	27	2	15	33	40	26	31	9	3	35	18

$$\frac{1}{3} \text{ of } 108 = \boxed{} \rightarrow \boxed{\text{T}}$$

$4/6$ of $30 = \boxed{} \rightarrow \boxed{\text{W}}$

$$2/6 \text{ of } 114 = \boxed{} \rightarrow \mathbf{C}$$

$$\frac{1}{3} \text{ of } 66 = \boxed{} \rightarrow \boxed{\text{H}}$$

$1/2 \text{ of } 58 = \boxed{} \rightarrow \boxed{\mathbf{D}}$

5/10 of 70 = → **N**

$$\frac{1}{6} \text{ of } 162 = \boxed{} \rightarrow \mathbf{R}$$

$$2/8 \text{ of } 160 = \boxed{} \rightarrow \mathbf{J}$$

$$2/10 \text{ of } 160 = \boxed{} \rightarrow \mathbf{S}$$

$1/3 \text{ of } 99 = \boxed{} \rightarrow \boxed{\text{E}}$

$$\frac{1}{8} \text{ of } 136 = \boxed{} \rightarrow \boxed{0}$$

$$2/10 \text{ of } 15 = \boxed{} \rightarrow \boxed{}$$

$$5/10 \text{ of } 18 = \boxed{} \rightarrow \mathbf{P}$$

$3/6$ of $30 = \boxed{} \rightarrow \boxed{\text{F}}$

6/10 of 30 = → **G**

$1/3 \text{ of } 78 = \boxed{} \rightarrow \boxed{\text{U}}$

4/8 of 4 = → **A**

$\frac{1}{4}$ of 124 = $\rightarrow$ **M**

Scratch space:

CLUE 3

Word problems

An automatic iron golem farm has been tampered with, causing a strange logic loop in the redstone wiring. Solved equations about the spawning rates will reveal the intruder's next coordinate.

Solve each problem, then write its letter in the boxes to fill in the missing word.

Someone scared the villain off with W C K S .

83 54 115 24 31 32 99 24 115

There were 96 redstone comparators. 13 were used up. How many redstone comparators are left?

Answer: → W

Mumbo lined up 8 rows of 3 redstone comparators. How many redstone comparators in all?

Answer: → E

There were 143 slimeballs. 28 were used up. How many slimeballs are left?

Answer: → T

There were 129 redstone comparators. 30 were used up. How many redstone comparators are left?

Answer: → U

Mumbo found 26 glowstone dust yesterday and 5 more today. How many glowstone dust in all?

Answer: → R

Mumbo lined up 6 rows of 9 netherite scrap. How many netherite scrap in all?

Answer: → A

Mumbo lined up 4 rows of 8 glowstone dust. How many glowstone dust in all?

Answer: → B

Scratch space:

CLUE 4

Multi-step word problems

The local villagers at the trading hall are panicked. To get them to talk, you must calculate the exact cost of emerald trades needed to buy their map, accounting for both discounts and taxes.

Solve each problem, then write its letter in the boxes to fill in the missing word.

A strand of S N K B R O W N hair turned up at the scene.

There were 221 glowstone dust in all. 3 The Redstone Rangers used 7 glowstone dust each. The other 5 The Redstone Rangers shared the rest equally. How many glowstone dust did each of the other The Redstone Rangers get?

Answer: → S

Mumbo earned 7 netherite scrap in each of 6 rounds, plus 56 bonus netherite scrap. Then 11 netherite scrap were lost. How many netherite scrap are left?

Answer: → E

There were 110 netherite scrap in all. 30 netherite scrap were set aside. The rest were shared equally among 8 The Redstone Rangers. How many netherite scrap did each get?

Answer: → T

There were 561 slimeballs in all. 4 The Redstone Rangers used 29 slimeballs each. The other 5 The Redstone Rangers shared the rest equally. How many slimeballs did each of the other The Redstone Rangers get?

Answer: → U

Mumbo earned 5 glowstone dust in each of 5 rounds, plus 44 bonus glowstone dust. Then 11 glowstone dust were lost. How many glowstone dust are left?

Answer: → P

Mumbo collected 46 netherite scrap in the morning and 70 netherite scrap in the afternoon, then split them equally among 4 The Redstone Rangers. How many netherite scrap did each get?

Answer: → A

Mumbo earned 6 redstone comparators in each of 3 rounds, plus 4 bonus redstone comparators. Then 7 redstone comparators were lost. How many redstone comparators are left?

Answer: → M

Scratch space:

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

A pile of golden carrots was split among several fast-moving horses near the escape path. Dividing the total carrots by the horses reveals the exact speed boost the suspect gained.

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:

$48 \div 8 = \boxed{}$

$84 \div 7 = \boxed{}$

$9 \div 3 = \boxed{}$

$20 \div 4 = \boxed{}$

$120 \div 12 = \boxed{}$

$28 \div 4 = \boxed{}$

$44 \div 11 = \boxed{}$

$8 \div 8 = \boxed{}$

$22 \div 11 = \boxed{}$

$36 \div 4 = \boxed{}$

$33 \div 3 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain throws a splash potion, then blocks with a wooden shield.
2. The villain fires an enchanted bow, then eats a golden apple.
3. The villain chops with a diamond axe, then boosts away with a firework rocket.
4. The villain swings a netherite sword, then eats a golden apple.
5. The villain hurls a trident, then boosts away with a firework rocket.
6. The villain hurls a trident, then blocks with a wooden shield.
7. The villain throws a splash potion, then teleports using an ender pearl.
8. The villain fires an enchanted bow, then boosts away with a firework rocket.
9. The villain hurls a trident, then teleports using an ender pearl.
10. The villain swings a netherite sword, then triggers a totem of undying.
11. The villain fires an enchanted bow, then teleports using an ender pearl.
12. The villain chops with a diamond axe, then triggers a totem of undying.

Answer Key

The Grief of Great Grid City

Culprit: Keralis

Enchanted Bow · Firework Rocket · Strafe Jumping · Steampunk Brown · Water Buckets

Trail: Start 21 → Clue 1 15 → Clue 2 10 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DOES NOT USE AN ENDER PEARL"

$6 \times 9 = 54$ (T) · $5 \times 9 = 45$ (E) · $3 \times 2 = 6$ (S) · $7 \times 4 = 28$ (L) · $10 \times 11 = 110$ (U) · $11 \times 8 = 88$ (R) · $2 \times 12 = 24$ (O) · $7 \times 5 = 35$ (A) · $12 \times 11 = 132$ (V) · $9 \times 3 = 27$ (H) · $11 \times 1 = 11$ (P) · $10 \times 5 = 50$ (N) · $9 \times 9 = 81$ (D) · $11 \times 9 = 99$ (I)

Clue 2 (Fractions of a number): "THE SUSPECT WAS SPOTTED STRAFE JUMPING"

$\frac{1}{3}$ of 108 = 36 (T) · $\frac{4}{6}$ of 30 = 20 (W) · $\frac{2}{6}$ of 114 = 38 (C) · $\frac{1}{3}$ of 66 = 22 (H) · $\frac{1}{2}$ of 58 = 29 (D) · $\frac{5}{10}$ of 70 = 35 (N) · $\frac{1}{6}$ of 162 = 27 (R) · $\frac{2}{8}$ of 160 = 40 (J) · $\frac{2}{10}$ of 160 = 32 (S) · $\frac{1}{3}$ of 99 = 33 (E) · $\frac{1}{8}$ of 136 = 17 (O) · $\frac{2}{10}$ of 15 = 3 (I) · $\frac{5}{10}$ of 18 = 9 (P) · $\frac{3}{6}$ of 30 = 15 (F) · $\frac{6}{10}$ of 30 = 18 (G) · $\frac{1}{3}$ of 78 = 26 (U) · $\frac{4}{8}$ of 4 = 2 (A) · $\frac{1}{4}$ of 124 = 31 (M)

Clue 3 (Word problems): "WATER BUCKETS"

There were 96 redstone comparators. 13 were used up. How many redstone comparators are left? = 83 (W) · Mumbo lined up 8 rows of 3 redstone comparators. How many redstone comparators in all? = 24 (E) · There were 143 slimeballs. 28 were used up. How many slimeballs are left? = 115 (T) · There were 129 redstone comparators. 30 were used up. How many redstone comparators are left? = 99 (U) · Mumbo found 26 glowstone dust yesterday and 5 more today. How many glowstone dust in all? = 31 (R) · Mumbo lined up 6 rows of 9 netherite scrap. How many netherite scrap in all? = 54 (A) · Mumbo lined up 4 rows of 8 glowstone dust. How many glowstone dust in all? = 32 (B)

Clue 4 (Multi-step word problems): "STEAMPUNK BROWN"

There were 221 glowstone dust in all. 3 The Redstone Rangers used 7 glowstone dust each. The other 5 The Redstone Rangers shared the rest equally. How many glowstone dust did each of the other The Redstone Rangers get? = 40 (S) · Mumbo earned 7 netherite scrap in each of 6 rounds, plus 56 bonus netherite scrap. Then 11 netherite scrap were lost. How many netherite scrap are left? = 87 (E) · There were 110 netherite scrap in all. 30 netherite scrap were set aside. The rest were shared equally among 8 The Redstone Rangers. How many netherite scrap did each get? = 10 (T) · There were 561 slimeballs in all. 4 The Redstone Rangers used 29 slimeballs each. The other 5 The Redstone Rangers shared the rest equally. How many slimeballs did each of the other The Redstone Rangers get? = 89 (U) · Mumbo earned 5 glowstone dust in each of 5 rounds, plus 44 bonus glowstone dust. Then 11 glowstone dust were lost. How many glowstone dust are left? = 58 (P) · Mumbo collected 46 netherite scrap in the morning and 70 netherite scrap in the afternoon, then split them equally among 4 The Redstone Rangers. How many netherite scrap did each get? = 29 (A) · Mumbo earned 6 redstone comparators in each of 3 rounds, plus 4 bonus redstone comparators. Then 7 redstone comparators were lost. How many redstone comparators are left? = 15 (M)

Clue 5 (Division facts (1-12)): surviving statement is box 8 → Keralis

$48 \div 8 = 6$ · $84 \div 7 = 12$ · $9 \div 3 = 3$ · $20 \div 4 = 5$ · $120 \div 12 = 10$ · $28 \div 4 = 7$ · $44 \div 11 = 4$ · $8 \div 8 = 1$ · $22 \div 11 = 2$ · $36 \div 4 = 9$ · $33 \div 3 = 11$