



The Great Blocky Stadium Heist

Grade 8 math · Exponents, Square roots, Pythagorean theorem, Order of operations, Two-step equations · Reading level grades 5-6

Detective: _____ Date: _____

The championship match between the Pixel Raptors and the Crafting Cobras was about to start when someone hacked the server and stole the Golden Diamond Trophy! The thief left a trail of voxel blocks, soccer balls, and dinosaur footprints behind.

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 Game Glitcher is _____

Possible suspects

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

NAME	SIGNATURE MOVE	VOXEL ARMOR PIECE	SHOOTING STYLE	DINO HELMET STYLE	GAME GLITCH TRIGGER
Square Sam	Fire Kick	Diamond Boots	Right handed shooter	Green Dino Crest	Free throw line
Kevin Durant	Voxel Shield	Pterodactyl Wings	Left handed shooter	Green Dino Crest	Water blocks
Megan Rapinoe	Voxel Shield	Netherite Helmet	Left handed shooter	Orange Fire Helm	Water blocks
Alex Morgan	Teleport Dribble	Redstone Glow	Left handed shooter	Blue Pixel Mohawk	Water blocks
Slam Dunk Sally	Voxel Shield	Netherite Helmet	Left handed shooter	Blue Pixel Mohawk	Water blocks
Alex Crafter	Voxel Shield	Pterodactyl Wings	Left handed shooter	Blue Pixel Mohawk	Water blocks
Steve Voxel	Voxel Shield	Obsidian Jersey	Left handed shooter	Blue Pixel Mohawk	Referee whistles
Voxel Val	Mega Jump	Diamond Boots	Left handed shooter	Blue Pixel Mohawk	Free throw line
Raptor Ryan	Teleport Dribble	Pterodactyl Wings	Left handed shooter	Blue Pixel Mohawk	Free throw line
Tony T Rex	Dunking Raptor	Diamond Boots	Right handed shooter	Blue Pixel Mohawk	Water blocks
LeBron James	Mega Jump	Diamond Boots	Right handed shooter	Green Dino Crest	Free throw line
Dunking Dale	Mega Jump	Netherite Helmet	Left handed shooter	Blue Pixel Mohawk	Water blocks
Harry Kane	Mega Jump	Diamond Boots	Right handed shooter	Blue Pixel Mohawk	Water blocks
Net Ninja	Dunking Raptor	Obsidian Jersey	Right handed shooter	Green Dino Crest	Free throw line
Spike Dino	Dunking Raptor	Obsidian Jersey	Left handed shooter	Green Dino Crest	Water blocks
Hopper Holly	Dunking Raptor	Pterodactyl Wings	Right handed shooter	Green Dino Crest	Water blocks
Creeper Chris	Dunking Raptor	Pterodactyl Wings	Left handed shooter	Orange Fire Helm	Referee whistles
Steph Curry	Teleport Dribble	Pterodactyl Wings	Left handed shooter	Blue Pixel Mohawk	Referee whistles
Pixel Pete	Mega Jump	Pterodactyl Wings	Left handed shooter	Blue Pixel Mohawk	Free throw line
Lionel Messi	Dunking Raptor	Pterodactyl Wings	Left handed shooter	Blue Pixel Mohawk	Water blocks
Chloe Cleats	Voxel Shield	Redstone Glow	Left handed shooter	Blue Pixel Mohawk	Free throw line

CLUE 1

The hacker locked the scoreboard with an exponential security code. Solve the math to see how fast the glitch is growing.

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

81 225 64 324 27 324 16 64 400 81 121 196 64 324 100 196 81

225 441 4 64 81 225 64 256 64 121 324 81 196 100 64 729 25 196 343

$$3^4 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$14^2 = \boxed{} \rightarrow \boxed{0}$$

$$15^2 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$18^2 = \boxed{} \rightarrow \boxed{\mathbf{S}}$$

$7^3 = \square \rightarrow \boxed{W}$

$$4^3 = \boxed{} \rightarrow \boxed{\text{E}}$$

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

$$10^2 = \boxed{} \rightarrow \boxed{\text{N}}$$

$3^6 = \boxed{} \rightarrow \boxed{\mathbf{G}}$

$$3^3 = \boxed{} \rightarrow \boxed{\text{U}}$$

$21^2 = \boxed{} \rightarrow \boxed{\mathbf{A}}$

$$20^2 = \boxed{} \rightarrow \boxed{\text{C}}$$

$$5^2 = \boxed{} \rightarrow \boxed{\text{L}}$$

$11^2 = \boxed{} \rightarrow \boxed{\text{D}}$

$$4^4 = \boxed{} \rightarrow \boxed{\mathbf{R}}$$

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

Scratch space:

CLUE 2 Square roots

We need to find the square root of the grid areas on the pixel field to trace the thief's escape path.

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

T						T										T			
7	25	12	13	12	18	7	25	3	10	8	12	8	11	25	22	22	7	12	24
			T																
13	12	18	7	11	5	17	8	20	12	11	22	10	11	15	24	12	12	10	

$\sqrt{49} = \square \rightarrow \boxed{\text{T}}$

$\sqrt{144} = \square \rightarrow \boxed{\text{E}}$

$\sqrt{64} = \square \rightarrow \boxed{\text{D}}$

$\sqrt{576} = \square \rightarrow \boxed{\text{R}}$

$\sqrt{100} = \square \rightarrow \boxed{\text{N}}$

$\sqrt{484} = \square \rightarrow \boxed{\text{O}}$

$\sqrt{324} = \square \rightarrow \boxed{\text{F}}$

$\sqrt{400} = \square \rightarrow \boxed{\text{G}}$

$\sqrt{25} = \square \rightarrow \boxed{\text{M}}$

$\sqrt{169} = \square \rightarrow \boxed{\text{L}}$

$\sqrt{121} = \square \rightarrow \boxed{\text{S}}$

$\sqrt{225} = \square \rightarrow \boxed{\text{C}}$

$\sqrt{289} = \square \rightarrow \boxed{\text{U}}$

$\sqrt{625} = \square \rightarrow \boxed{\text{H}}$

$\sqrt{9} = \square \rightarrow \boxed{\text{A}}$

Scratch space:

CLUE 4

Order of operations

A damaged redstone repeater on the server wall needs its order of operations solved to boot up the security footage.

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

W																
50	19	73	45	114	38	32	26	99	58	114	19	76	65	120	19	58
				W												
78	45	88	26	50	14	73	65	99	19	43						

$5 \times 11 - 5 = \square \rightarrow \boxed{W}$

$41 + 8 \times 3 = \square \rightarrow \boxed{I}$

$4 \times 7 - 2 = \square \rightarrow \boxed{A}$

$12 \times 8 - 8 = \square \rightarrow \boxed{H}$

$6 + 4 \times 2 = \square \rightarrow \boxed{K}$

$11 \times 12 - 12 = \square \rightarrow \boxed{X}$

$20 + 4 \times 3 = \square \rightarrow \boxed{D}$

$9 \times 7 - 18 = \square \rightarrow \boxed{O}$

$7 \times 9 - 25 = \square \rightarrow \boxed{N}$

$10 \times 11 - 11 = \square \rightarrow \boxed{B}$

$10 \times 10 - 22 = \square \rightarrow \boxed{M}$

$31 + 3 \times 4 = \square \rightarrow \boxed{R}$

$46 + 6 \times 2 = \square \rightarrow \boxed{L}$

$7 + 6 \times 2 = \square \rightarrow \boxed{E}$

$9 \times 11 - 23 = \square \rightarrow \boxed{P}$

$12 \times 11 - 18 = \square \rightarrow \boxed{U}$

$55 + 2 \times 9 = \square \rightarrow \boxed{F}$

Scratch space:

CLUE 5**Two-step equations - the last clue**

The suspect rented a private skybox for a flat entry fee plus a rate per hour. Solve the two-step equation to see how long they stayed inside.

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:

$2x + 8 = 20, x = \boxed{}$

$4x + 12 = 60, x = \boxed{}$

$3x + 2 = 35, x = \boxed{}$

$2x + 6 = 14, x = \boxed{}$

$2x + 6 = 8, x = \boxed{}$

$4x + 5 = 17, x = \boxed{}$

$3x + 5 = 29, x = \boxed{}$

$3x + 11 = 32, x = \boxed{}$

$6x + 9 = 69, x = \boxed{}$

$2x + 6 = 10, x = \boxed{}$

$4x + 12 = 32, x = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain performed a sneaky Teleport Dribble, then shrugged off the damage with a Netherite Helmet.
2. The villain performed a sneaky Teleport Dribble, then glided over the goalposts using Pterodactyl Wings.
3. The villain unleashed a blazing Fire Kick, then stomped away in Diamond Boots.
4. The villain activated the Dunking Raptor boost, then lit up the dark tunnels with a Redstone Glow.
5. The villain activated the Dunking Raptor boost, then shrugged off the damage with a Netherite Helmet.
6. The villain activated the Dunking Raptor boost, then glided over the goalposts using Pterodactyl Wings.
7. The villain performed a sneaky Teleport Dribble, then deflected the penalty kicks with an Obsidian Jersey.
8. The villain unleashed a blazing Fire Kick, then lit up the dark tunnels with a Redstone Glow.
9. The villain summoned a massive Voxel Shield, then glided over the goalposts using Pterodactyl Wings.
10. The villain launched into a physics-defying Mega Jump, then stomped away in Diamond Boots.
11. The villain launched into a physics-defying Mega Jump, then shrugged off the damage with a Netherite Helmet.
12. The villain summoned a massive Voxel Shield, then shrugged off the damage with a Netherite Helmet.

Answer Key

The Great Blocky Stadium Heist

Culprit: Alex Crafter

Voxel Shield · Pterodactyl Wings · Left handed shooter · Blue Pixel Mohawk · Water blocks

Trail: Start 21 → Clue 1 19 → Clue 2 13 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Exponents): "THE SUSPECT DOES NOT HAVE THE REDSTONE GLOW"

$3^4 = 81$ (T) · $14^2 = 196$ (O) · $15^2 = 225$ (H) · $18^2 = 324$ (S) · $7^3 = 343$ (W) · $4^3 = 64$ (E) · $2^2 = 4$ (V) · $10^2 = 100$ (N) · $3^6 = 729$ (G) · $3^3 = 27$ (U) · $21^2 = 441$ (A) · $20^2 = 400$ (C) · $5^2 = 25$ (L) · $11^2 = 121$ (D) · $4^4 = 256$ (R) · $4^2 = 16$ (P)

Clue 2 (Square roots): "THE LEFT HANDED SHOOTER LEFT SMUDGES ON SCREEN"

$\sqrt{49} = 7$ (T) · $\sqrt{144} = 12$ (E) · $\sqrt{64} = 8$ (D) · $\sqrt{576} = 24$ (R) · $\sqrt{100} = 10$ (N) · $\sqrt{484} = 22$ (O) · $\sqrt{324} = 18$ (F) · $\sqrt{400} = 20$ (G) · $\sqrt{25} = 5$ (M) · $\sqrt{169} = 13$ (L) · $\sqrt{121} = 11$ (S) · $\sqrt{225} = 15$ (C) · $\sqrt{289} = 17$ (U) · $\sqrt{625} = 25$ (H) · $\sqrt{9} = 3$ (A)

Clue 3 (Pythagorean theorem): "THEY FLED WHEN THEY SAW WATER BLOCKS"

legs 24 and 70, hypotenuse = 74 (T) · legs 14 and 48, hypotenuse = 50 (H) · legs 6 and 8, hypotenuse = 10 (S) · legs 18 and 24, hypotenuse = 30 (L) · legs 21 and 72, hypotenuse = 75 (Y) · legs 32 and 60, hypotenuse = 68 (B) · legs 12 and 16, hypotenuse = 20 (A) · legs 3 and 4, hypotenuse = 5 (F) · legs 60 and 63, hypotenuse = 87 (C) · legs 40 and 42, hypotenuse = 58 (K) · legs 9 and 12, hypotenuse = 15 (R) · legs 20 and 48, hypotenuse = 52 (E) · legs 25 and 60, hypotenuse = 65 (N) · legs 8 and 15, hypotenuse = 17 (O) · legs 16 and 30, hypotenuse = 34 (W) · legs 24 and 45, hypotenuse = 51 (D)

Clue 4 (Order of operations): "WE FOUND A BLUE PIXEL MOHAWK FIBER"

$5 \times 11 - 5 = 50$ (W) · $41 + 8 \times 3 = 65$ (I) · $4 \times 7 - 2 = 26$ (A) · $12 \times 8 - 8 = 88$ (H) · $6 + 4 \times 2 = 14$ (K) · $11 \times 12 - 12 = 120$ (X) · $20 + 4 \times 3 = 32$ (D) · $9 \times 7 - 18 = 45$ (O) · $7 \times 9 - 25 = 38$ (N) · $10 \times 11 - 11 = 99$ (B) · $10 \times 10 - 22 = 78$ (M) · $31 + 3 \times 4 = 43$ (R) · $46 + 6 \times 2 = 58$ (L) · $7 + 6 \times 2 = 19$ (E) · $9 \times 11 - 23 = 76$ (P) · $12 \times 11 - 18 = 114$ (U) · $55 + 2 \times 9 = 73$ (F)

Clue 5 (Two-step equations): surviving statement is box 9 → Alex Crafter

$2x + 8 = 20, x = 6$ · $4x + 12 = 60, x = 12$ · $3x + 2 = 35, x = 11$ · $2x + 6 = 14, x = 4$ · $2x + 6 = 8, x = 1$ · $4x + 5 = 17, x = 3$ · $3x + 5 = 29, x = 8$ · $3x + 11 = 32, x = 7$ · $6x + 9 = 69, x = 10$ · $2x + 6 = 10, x = 2$ · $4x + 12 = 32, x = 5$