



The Cup of the Netherite Soccer Ball

Grade 7 math · Integers, Percentages, Order of operations, Exponents, Two-step equations · Reading level grades 5-6

Detective: _____ **Date:** _____

The grand championship match of the Blocky Soccer League was about to begin when someone grieved the main pitch! The legendary Netherite Soccer Ball has been stolen from its bedrock pedestal. A mysterious figure was spotted fleeing into a portal, leaving behind a trail of blocks and grass turf. We must use our math skills to solve the clues and catch the thief!

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 Grieving Striker is _____

Possible suspects

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

NAME	GRIEFING SKILL	SOCCER SIGNATURE MOVE	DOMINANT FOOT	HELMET CHOICE	CRITICAL WEAKNESS
Erling Haaland	Redstone Wiring	Power Header	Left Footed	Golden Helmet	Milk Bucket
Luka Modric	Lava Pouring	Super Speed Dribble	Left Footed	Golden Helmet	Water Potion
Mohamed Salah	Creeper Spawning	Super Speed Dribble	Left Footed	Diamond Helmet	Tamed Wolf
Bukayo Saka	TNT Launching	Bicycle Kick Blast	Left Footed	Diamond Helmet	Milk Bucket
Cristiano Ronaldo	Creeper Spawning	Curved Free Kick	Left Footed	Diamond Helmet	Water Potion
Phil Foden	Bedrock Blocking	Curved Free Kick	Right Footed	Diamond Helmet	Water Potion
Robert Lewandowski	Redstone Wiring	Curved Free Kick	Right Footed	Netherite Helmet	Water Potion
Kevin De Bruyne	Lava Pouring	Power Header	Left Footed	Golden Helmet	Tamed Wolf
Declan Rice	TNT Launching	Bicycle Kick Blast	Right Footed	Golden Helmet	Water Potion
Alex Morgan	Lava Pouring	Phantom Slide Tackle	Right Footed	Diamond Helmet	Milk Bucket
Kylian Mbappe	Redstone Wiring	Power Header	Right Footed	Golden Helmet	Water Potion
Virgil van Dijk	TNT Launching	Power Header	Left Footed	Diamond Helmet	Milk Bucket
Marcus Rashford	TNT Launching	Curved Free Kick	Left Footed	Golden Helmet	Tamed Wolf
Lionel Messi	Creeper Spawning	Curved Free Kick	Left Footed	Diamond Helmet	Milk Bucket
Sam Kerr	Bedrock Blocking	Power Header	Right Footed	Golden Helmet	Water Potion
Jude Bellingham	TNT Launching	Super Speed Dribble	Left Footed	Diamond Helmet	Milk Bucket
Neymar Jr	Lava Pouring	Phantom Slide Tackle	Left Footed	Diamond Helmet	Milk Bucket
Bruno Fernandes	Creeper Spawning	Bicycle Kick Blast	Left Footed	Golden Helmet	Water Potion
Harry Kane	Lava Pouring	Power Header	Left Footed	Golden Helmet	Water Potion
Antoine Griezmann	TNT Launching	Phantom Slide Tackle	Right Footed	Golden Helmet	Tamed Wolf
Zlatan Ibrahimovic	Redstone Wiring	Bicycle Kick Blast	Right Footed	Netherite Helmet	Water Potion

CLUE 1

The stadium temperature sensor recorded a sudden drop in degrees below zero when the grieving happened. Let us track the deep subterranean depths of the intruder's tunnel to decode the first clue.

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

21 5 3 10 24 19 19 7 24 20 26 16 3 17 20 16 21

30 17 3 29 24 6 14 6 19 3 22 24 6 22 29 19 7 17 21

$$(-8) + 29 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$13 - (-13) = \boxed{} \rightarrow \boxed{\text{D}}$$

$$(-14) + 31 = \boxed{} \rightarrow \boxed{\mathbf{S}}$$

$$(-9) + 19 = \boxed{} \rightarrow \boxed{\mathbf{V}}$$

$$(-5) + 10 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$6 - (-10) = \boxed{} \rightarrow \boxed{0}$$

$$(-6) + 9 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$(-4) + 34 = \boxed{} \rightarrow \boxed{\text{U}}$$

$18 - (-4) = \boxed{} \rightarrow \boxed{\text{K}}$

$$(-8) + 14 = \boxed{} \rightarrow \boxed{\text{C}}$$

$$(-14) + 33 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$22 - (-2) = \boxed{} \rightarrow \boxed{I}$$

$$(-4) + 11 = \boxed{} \rightarrow \boxed{\mathbf{A}}$$

$15 - (-5) = \boxed{} \rightarrow \boxed{\text{N}}$

$$(-15) + 29 = \boxed{} \rightarrow \boxed{\text{Y}}$$

$$27 - (-2) = \boxed{} \rightarrow \boxed{\mathbf{B}}$$

Scratch space:

CLUE 2

The goalkeeper checked his diamond armor durability bar, which lost a precise percentage of its total strength during the blast. Use this percentage calculation to reveal another clue.

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

Diagram illustrating the sequence of numbers and the placement of 'T' markers across three rows:

- Row 1: 33 (T), 58, 30, 42, 54, 13, 13, 29, 29, 39, 42, 29, 30, 14, 33 (T), 58, 30
- Row 2: 32, 46, 18, 18, 28, 39, 33 (T), 58, 33 (T), 58, 30, 39, 54, 18, 30, 7, 33 (T)
- Row 3: 7, 13, 13, 33 (T)

10% of 330 = → **T**

5% of 640 = → **B**

50% of 58 = → **K**

25% of 232 = → **H**

20% of 70 = → **D**

10% of 70 = → **F**

50% of 108 = → **R**

25% of 168 = → **C**

5% of 360 = →

25% of 120 = → **E**

5% of 780 = →

50% of 26 = →

50% of 56 = → **W**

50% of 92 = → **A**

Scratch space:

CLUE 3

Order of operations

To fix the stadium lights, we must calculate the total redstone energy using a strict order of operations on the main circuit board.

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

T			T															
43	65	37	43	65	84	37	38	64	63	45	63	31	63	116	38	64	69	72
63	72	84	57	11	29	86	22	11	37	T								

$29 + 2 \times 7 = \square \rightarrow \text{[T]}$

$5 \times 7 - 24 = \square \rightarrow \text{[K]}$

$10 + 4 \times 7 = \square \rightarrow \text{[F]}$

$54 + 2 \times 5 = \square \rightarrow \text{[R]}$

$12 \times 7 - 19 = \square \rightarrow \text{[H]}$

$5 \times 8 - 3 = \square \rightarrow \text{[E]}$

$30 + 6 \times 7 = \square \rightarrow \text{[M]}$

$3 \times 11 - 4 = \square \rightarrow \text{[B]}$

$12 \times 8 - 10 = \square \rightarrow \text{[U]}$

$10 \times 10 - 16 = \square \rightarrow \text{[I]}$

$1 + 3 \times 7 = \square \rightarrow \text{[C]}$

$21 + 6 \times 8 = \square \rightarrow \text{[O]}$

$15 + 4 \times 4 = \square \rightarrow \text{[W]}$

$33 + 6 \times 5 = \square \rightarrow \text{[A]}$

$10 \times 6 - 3 = \square \rightarrow \text{[L]}$

$11 \times 6 - 21 = \square \rightarrow \text{[N]}$

$11 \times 12 - 16 = \square \rightarrow \text{[Y]}$

Scratch space:

CLUE 4 Exponents

The villain threw down cloning potions that multiplied at an exponential rate across the pitch. Solve the power of these numbers to find where the suspect dropped their helmet.

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

W																			
196	169	144	27	100	324	25	25	400	343	36	27	324	25	64	169	8	36	169	49
32	64	343	361	25	32	343	49	49	64	169	32	16	169	324	169				

$14^2 = \square \rightarrow$ W	$12^2 = \square \rightarrow$ F	$10^2 = \square \rightarrow$ U	$18^2 = \square \rightarrow$ N
$19^2 = \square \rightarrow$ R	$2^6 = \square \rightarrow$ H	$2^5 = \square \rightarrow$ S	$7^2 = \square \rightarrow$ T
$4^2 = \square \rightarrow$ C	$2^3 = \square \rightarrow$ L	$7^3 = \square \rightarrow$ A	$20^2 = \square \rightarrow$ I
$5^2 = \square \rightarrow$ D	$13^2 = \square \rightarrow$ E	$6^2 = \square \rightarrow$ M	$3^3 = \square \rightarrow$ O

Scratch space:

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

We found a crafting recipe for speed potions that requires solving a balance of ingredients. Work out this two-step mystery to find the villain's final weakness.

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:

$6x + 6 = 36, x = \boxed{}$

$6x + 3 = 9, x = \boxed{}$

$2x + 4 = 10, x = \boxed{}$

$3x + 8 = 32, x = \boxed{}$

$4x + 9 = 17, x = \boxed{}$

$4x + 1 = 29, x = \boxed{}$

$6x + 12 = 36, x = \boxed{}$

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

$4x + 2 = 38, x = \boxed{}$

$3x + 1 = 34, x = \boxed{}$

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

Step 2 - cross out the sentence with each answer:

1. The villain spilled glowing hot orange lava, then slide tackled the referee into a water pool.
2. The villain launched a sparkling red primed TNT block, then curved a glowing ball around the goalie.
3. The villain launched a sparkling red primed TNT block, then scored a powerful header past the golems.
4. The villain summoned a green explosive creeper, then did an amazing bicycle kick.
5. The villain launched a sparkling red primed TNT block, then dribbled through three defenders at once.
6. The villain built a giant solid bedrock wall, then curved a glowing ball around the goalie.
7. The villain rewired the stadium scoreboard, then dribbled through three defenders at once.
8. The villain summoned a green explosive creeper, then dribbled through three defenders at once.
9. The villain spilled glowing hot orange lava, then curved a glowing ball around the goalie.
10. The villain summoned a green explosive creeper, then curved a glowing ball around the goalie.
11. The villain built a giant solid bedrock wall, then did an amazing bicycle kick.
12. The villain rewired the stadium scoreboard, then did an amazing bicycle kick.

Answer Key

The Cup of the Netherite Soccer Ball

Culprit: Lionel Messi

Creeper Spawning · Curved Free Kick · Left Footed · Diamond Helmet · Milk Bucket

Trail: Start 21 → Clue 1 17 → Clue 2 11 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Integers): "THE VILLAIN DOES NOT USE BICYCLE KICK BLAST"

$(-8) + 29 = 21$ (T) · $13 - (-13) = 26$ (D) · $(-14) + 31 = 17$ (S) · $(-9) + 19 = 10$ (V) · $(-5) + 10 = 5$ (H) · $6 - (-10) = 16$ (O) · $(-6) + 9 = 3$ (E) · $(-4) + 34 = 30$ (U) · $18 - (-4) = 22$ (K) · $(-8) + 14 = 6$ (C) · $(-14) + 33 = 19$ (L) · $22 - (-2) = 24$ (I) · $(-4) + 11 = 7$ (A) · $15 - (-5) = 20$ (N) · $(-15) + 29 = 14$ (Y) · $27 - (-2) = 29$ (B)

Clue 2 (Percentages): "THE CROOK KICKED THE BALL WITH THEIR LEFT FOOT"

10% of 330 = 33 (T) · 5% of 640 = 32 (B) · 50% of 58 = 29 (K) · 25% of 232 = 58 (H) · 20% of 70 = 14 (D) · 10% of 70 = 7 (F) · 50% of 108 = 54 (R) · 25% of 168 = 42 (C) · 5% of 360 = 18 (L) · 25% of 120 = 30 (E) · 5% of 780 = 39 (I) · 50% of 26 = 13 (O) · 50% of 56 = 28 (W) · 50% of 92 = 46 (A)

Clue 3 (Order of operations): "THE THIEF RAN AWAY FROM A MILK BUCKET"

$29 + 2 \times 7 = 43$ (T) · $5 \times 7 - 24 = 11$ (K) · $10 + 4 \times 7 = 38$ (F) · $54 + 2 \times 5 = 64$ (R) · $12 \times 7 - 19 = 65$ (H) · $5 \times 8 - 3 = 37$ (E) · $30 + 6 \times 7 = 72$ (M) · $3 \times 11 - 4 = 29$ (B) · $12 \times 8 - 10 = 86$ (U) · $10 \times 10 - 16 = 84$ (I) · $1 + 3 \times 7 = 22$ (C) · $21 + 6 \times 8 = 69$ (O) · $15 + 4 \times 4 = 31$ (W) · $33 + 6 \times 5 = 63$ (A) · $10 \times 6 - 3 = 57$ (L) · $11 \times 6 - 21 = 45$ (N) · $11 \times 12 - 16 = 116$ (Y)

Clue 4 (Exponents): "WE FOUND DIAMOND HELMET SHARDS AT THE SCENE"

$14^2 = 196$ (W) · $12^2 = 144$ (F) · $10^2 = 100$ (U) · $18^2 = 324$ (N) · $19^2 = 361$ (R) · $2^6 = 64$ (H) · $2^5 = 32$ (S) · $7^2 = 49$ (T) · $4^2 = 16$ (C) · $2^3 = 8$ (L) · $7^3 = 343$ (A) · $20^2 = 400$ (I) · $5^2 = 25$ (D) · $13^2 = 169$ (E) · $6^2 = 36$ (M) · $3^3 = 27$ (O)

Clue 5 (Two-step equations): surviving statement is box 10 → Lionel Messi

$6x + 6 = 36, x = 5$ · $6x + 3 = 9, x = 1$ · $2x + 4 = 10, x = 3$ · $3x + 8 = 32, x = 8$ · $4x + 9 = 17, x = 2$ · $4x + 1 = 29, x = 7$ · $6x + 12 = 36, x = 4$ · $2x + 2 = 14, x = 6$ · $4x + 2 = 38, x = 9$ · $3x + 1 = 34, x = 11$ · $4x + 12 = 60, x = 12$