



# The Golden Trophy Glitch

Grade 4 math · Rounding, Addition, Subtraction, Multiplication, Division · Reading level grades 3-4

**Detective:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Someone swapped the Championship Trophy with a plastic decoy right before kickoff! The Head Referee needs your detective skills to inspect the field, question the players, and crack the clues before the final whistle.

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 Sneaky Striker 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 | FAVORITE GEAR       | STANCE       | HAIR STYLE     | MATCH<br>DISTRACTION |
|---------------|----------------|---------------------|--------------|----------------|----------------------|
| Mia Cleat     | Power Header   | Custom Captain Band | Left Footed  | Curly Afro     | Bright Floodlights   |
| Leo Sterling  | Power Header   | Patterned Headband  | Right Footed | Sleek Ponytail | Bright Floodlights   |
| Pablo Sweep   | Bicycle Kick   | Gold Shin Guards    | Right Footed | Spiky Hair     | Loud Whistles        |
| Ivy Whistle   | Power Header   | Gold Shin Guards    | Right Footed | Curly Afro     | Bright Floodlights   |
| Ella Striker  | Rocket Volley  | Gold Shin Guards    | Left Footed  | Spiky Hair     | Bright Floodlights   |
| Kira Pass     | Fast Dribble   | Padded Gloves       | Left Footed  | Curly Afro     | Bright Floodlights   |
| Maya Gomez    | Bicycle Kick   | Patterned Headband  | Left Footed  | Curly Afro     | Bright Floodlights   |
| Sophia Wall   | Rocket Volley  | Patterned Headband  | Left Footed  | Curly Afro     | Confetti Cannons     |
| Toby Keeper   | Curving Corner | Custom Captain Band | Left Footed  | Sleek Ponytail | Confetti Cannons     |
| Benny Header  | Curving Corner | Gold Shin Guards    | Right Footed | Spiky Hair     | Confetti Cannons     |
| Nico Volley   | Curving Corner | Custom Captain Band | Right Footed | Curly Afro     | Loud Whistles        |
| Olivia Save   | Bicycle Kick   | Padded Gloves       | Left Footed  | Spiky Hair     | Bright Floodlights   |
| Chloe Turf    | Rocket Volley  | Neon Cleats         | Left Footed  | Spiky Hair     | Bright Floodlights   |
| David Bend    | Curving Corner | Gold Shin Guards    | Left Footed  | Curly Afro     | Loud Whistles        |
| Lucas Goal    | Fast Dribble   | Padded Gloves       | Left Footed  | Spiky Hair     | Loud Whistles        |
| Riley Dribble | Fast Dribble   | Custom Captain Band | Left Footed  | Curly Afro     | Bright Floodlights   |
| Jack Tackle   | Bicycle Kick   | Gold Shin Guards    | Left Footed  | Curly Afro     | Bright Floodlights   |
| Grace Net     | Power Header   | Patterned Headband  | Left Footed  | Curly Afro     | Confetti Cannons     |
| Quinn Cross   | Fast Dribble   | Gold Shin Guards    | Left Footed  | Spiky Hair     | Confetti Cannons     |
| Hugo Pitch    | Bicycle Kick   | Patterned Headband  | Left Footed  | Sleek Ponytail | Loud Whistles        |
| Felix Corner  | Fast Dribble   | Custom Captain Band | Right Footed | Curly Afro     | Bright Floodlights   |

## CLUE 1 Rounding

The stadium scoreboard digital display was glitched and only showed rounded numbers for spectator entry.

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

|    |    |    |     |      |      |      |     |      |      |    |      |      |      |     |      |     |      |  |  |
|----|----|----|-----|------|------|------|-----|------|------|----|------|------|------|-----|------|-----|------|--|--|
| S  |    | S  |     |      |      |      |     |      |      | S  |      |      |      |     |      |     |      |  |  |
| 90 | 30 | 90 | 900 | 2900 | 3700 | 4300 | 200 | 3000 | 2900 | 90 | 1700 | 3000 | 4300 | 370 | 2900 | 290 | 1300 |  |  |

  

|     |      |     |     |    |    |     |      |     |    |     |      |     |    |  |  |  |  |  |  |
|-----|------|-----|-----|----|----|-----|------|-----|----|-----|------|-----|----|--|--|--|--|--|--|
|     |      |     |     | S  |    |     |      |     |    |     |      |     | S  |  |  |  |  |  |  |
| 500 | 3000 | 430 | 200 | 90 | 50 | 230 | 1700 | 500 | 30 | 290 | 1300 | 200 | 90 |  |  |  |  |  |  |

Round 91 to the nearest ten  → **S**

Round 48 to the nearest ten  → **H**

Round 4,271 to the nearest hundred  → **T**

Round 3,167 to the nearest thousand  → **O**

Round 885 to the nearest hundred  → **P**

Round 1,740 to the nearest hundred  → **N**

Round 427 to the nearest ten  → **L**

Round 534 to the nearest hundred  → **G**

Round 1,306 to the nearest hundred  → **R**

Round 373 to the nearest ten  → **W**

Round 248 to the nearest hundred  → **D**

Round 2,910 to the nearest hundred  → **E**

Round 287 to the nearest ten  → **A**

Round 227 to the nearest ten  → **I**

Round 29 to the nearest ten  → **U**

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

Scratch space:

## CLUE 2

Detective Leo counted the total practice cones gathered from both halves of the field.

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

7861 8395 8395 5367 6925 2531 2688 9472 5367 6347 6347 7521 8395 9009 5367 7521 6675

6347 9645 6347 6925 6675 2008 5367 2688 6347 6701 6675 7861 5367 7861 8395 8395 5367 6675 6220

$$5348 + 2513 = \boxed{\phantom{0000}} \rightarrow \boxed{\text{F}}$$

$939 + 1069 = \boxed{\phantom{0000}} \rightarrow \mathbf{C}$

$$4846 + 2079 = \boxed{\phantom{0000}} \rightarrow \boxed{\text{P}}$$

$$2629 + 4046 = \boxed{\phantom{0000}} \rightarrow \boxed{\text{E}}$$

$$4295 + 2052 = \boxed{\phantom{0000}} \rightarrow \boxed{\text{S}}$$

$$4130 + 3391 = \boxed{\phantom{0000}} \rightarrow \boxed{\text{H}}$$

$$5192 + 4453 = \boxed{\phantom{0000}} \rightarrow \boxed{\text{U}}$$

$$1796 + 892 = \boxed{\phantom{0000}} \rightarrow \boxed{\phantom{0000}}$$

$$1193 + 1338 = \boxed{\phantom{000}} \rightarrow \boxed{\text{R}}$$

$$3744 + 4651 = \boxed{\phantom{0000}} \rightarrow \boxed{0}$$

$4348 + 2353 = \boxed{\phantom{0000}} \rightarrow \boxed{\text{L}}$

$$5632 + 3377 = \boxed{\phantom{0000}} \rightarrow \boxed{\text{W}}$$

$$5189 + 4283 = \boxed{\phantom{0000}} \rightarrow \boxed{\text{N}}$$

$2411 + 3809 = \boxed{\phantom{0000}} \rightarrow \boxed{\text{D}}$

$$2902 + 2465 = \boxed{\phantom{0000}} \rightarrow \boxed{\text{T}}$$

Scratch space:

**CLUE 3**
**Subtraction**

The equipment manager checked how many water bottles were missing from the cooler.

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

|          |      |      |      |      |      |      |      |      |          |      |      |      |      |      |      |      |      |      |      |
|----------|------|------|------|------|------|------|------|------|----------|------|------|------|------|------|------|------|------|------|------|
| <b>T</b> |      |      |      |      |      |      |      |      | <b>T</b> |      |      |      |      |      |      |      |      |      |      |
| 6252     | 5886 | 3215 | 8986 | 1944 | 8986 | 5788 | 3215 | 4958 | 6252     | 7925 | 3365 | 8986 | 5308 | 2164 | 3380 | 7044 | 4081 | 3215 | 4081 |

  

|      |      |      |      |      |      |      |      |      |      |          |      |      |
|------|------|------|------|------|------|------|------|------|------|----------|------|------|
|      |      |      |      |      |      |      |      |      |      | <b>T</b> |      |      |
| 5308 | 5683 | 3954 | 2164 | 4090 | 4090 | 4081 | 2164 | 3380 | 7665 | 5886     | 6252 | 8986 |

$7599 - 1347 = \square \rightarrow \text{**T**}$

$11575 - 4531 = \square \rightarrow \text{**N**}$

$7704 - 2021 = \square \rightarrow \text{**Y**}$

$5335 - 2120 = \square \rightarrow \text{**E**}$

$7667 - 2 = \square \rightarrow \text{**G**}$

$4892 - 811 = \square \rightarrow \text{**D**}$

$6829 - 1871 = \square \rightarrow \text{**C**}$

$10103 - 2178 = \square \rightarrow \text{**W**}$

$6051 - 4107 = \square \rightarrow \text{**U**}$

$8258 - 4878 = \square \rightarrow \text{**I**}$

$9162 - 3374 = \square \rightarrow \text{**P**}$

$6612 - 1304 = \square \rightarrow \text{**B**}$

$6080 - 194 = \square \rightarrow \text{**H**}$

$11329 - 2343 = \square \rightarrow \text{**S**}$

$6962 - 3008 = \square \rightarrow \text{**F**}$

$4602 - 1237 = \square \rightarrow \text{**A**}$

$6251 - 2161 = \square \rightarrow \text{**O**}$

$2816 - 652 = \square \rightarrow \text{**L**}$

Scratch space:

**CLUE 4**
**Multiplication facts (1-12)**

Coach counted the total soccer balls stored neatly in equal rows inside the storage locker.

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

|    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |   |    |  |
|----|----|----|---|----|----|----|----|----|----|----|----|----|----|----|---|----|--|
| T  |    |    |   |    |    |    |    |    |    |    |    |    |    |    |   |    |  |
| 48 | 66 | 42 | 8 | 49 | 9  | 40 | 42 | 45 | 8  | 42 | 99 | 42 | 66 | 96 | 4 | 96 |  |
|    |    |    |   |    |    |    |    |    |    | T  |    |    |    |    |   |    |  |
| 8  | 3  | 49 | 5 | 2  | 66 | 96 | 9  | 49 | 45 | 48 | 49 | 96 | 99 | 4  |   |    |  |

$12 \times 4 =$

→ T

$7 \times 7 =$

→ R

$2 \times 1 =$

→ Y

$9 \times 5 =$

→ S

$8 \times 5 =$

→ M

$9 \times 11 =$

→ N

$12 \times 8 =$

→ A

$1 \times 4 =$

→ D

$1 \times 3 =$

→ U

$5 \times 1 =$

→ L

$1 \times 9 =$

→ I

$7 \times 6 =$

→ E

$11 \times 6 =$

→ H

$2 \times 4 =$

→ C

Scratch space:

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

The referee split the leftover shiny yellow cards evenly among all the match officials.

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:**

$72 \div 9 = \boxed{\phantom{00}}$

$1 \div 1 = \boxed{\phantom{00}}$

$14 \div 7 = \boxed{\phantom{00}}$

$110 \div 11 = \boxed{\phantom{00}}$

$70 \div 10 = \boxed{\phantom{00}}$

$120 \div 10 = \boxed{\phantom{00}}$

$36 \div 12 = \boxed{\phantom{00}}$

$32 \div 8 = \boxed{\phantom{00}}$

$15 \div 3 = \boxed{\phantom{00}}$

$99 \div 9 = \boxed{\phantom{00}}$

$9 \div 1 = \boxed{\phantom{00}}$

**Step 2 - cross out the sentence with each answer:**

1. The villain dribbled past the security gate, then flashed a custom captain band.
2. The villain dribbled past the security gate, then adjusted their padded gloves.
3. The villain headed the ball into the lights, then laced up their neon cleats.
4. The villain performed a sneaky bicycle kick, then strapped on gold shin guards.
5. The villain curved a shot around the guard, then strapped on gold shin guards.
6. The villain headed the ball into the lights, then flashed a custom captain band.
7. The villain performed a sneaky bicycle kick, then flashed a custom captain band.
8. The villain performed a sneaky bicycle kick, then fixed their patterned headband.
9. The villain shot a rocket volley across the turf, then flashed a custom captain band.
10. The villain performed a sneaky bicycle kick, then adjusted their padded gloves.
11. The villain curved a shot around the guard, then flashed a custom captain band.
12. The villain curved a shot around the guard, then fixed their patterned headband.

# Answer Key

## The Golden Trophy Glitch

### Culprit: Mia Cleat

Power Header · Custom Captain Band · Left Footed · Curly Afro · Bright Floodlights

Trail: Start 21 → Clue 1 14 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

#### Clue 1 (Rounding): "SUSPECT DOES NOT WEAR GOLD SHIN GUARDS"

Round 91 to the nearest ten = 90 (S) · Round 48 to the nearest ten = 50 (H) · Round 4,271 to the nearest hundred = 4300 (T) · Round 3,167 to the nearest thousand = 3000 (O) · Round 885 to the nearest hundred = 900 (P) · Round 1,740 to the nearest hundred = 1700 (N) · Round 427 to the nearest ten = 430 (L) · Round 534 to the nearest hundred = 500 (G) · Round 1,306 to the nearest hundred = 1300 (R) · Round 373 to the nearest ten = 370 (W) · Round 248 to the nearest hundred = 200 (D) · Round 2,910 to the nearest hundred = 2900 (E) · Round 287 to the nearest ten = 290 (A) · Round 227 to the nearest ten = 230 (I) · Round 29 to the nearest ten = 30 (U) · Round 3,662 to the nearest hundred = 3700 (C)

#### Clue 2 (Addition): "FOOTPRINTS SHOW THE SUSPECT IS LEFT FOOTED"

$5348 + 2513 = 7861$  (F) ·  $939 + 1069 = 2008$  (C) ·  $4846 + 2079 = 6925$  (P) ·  $2629 + 4046 = 6675$  (E) ·  $4295 + 2052 = 6347$  (S) ·  $4130 + 3391 = 7521$  (H) ·  $5192 + 4453 = 9645$  (U) ·  $1796 + 892 = 2688$  (I) ·  $1193 + 1338 = 2531$  (R) ·  $3744 + 4651 = 8395$  (O) ·  $4348 + 2353 = 6701$  (L) ·  $5632 + 3377 = 9009$  (W) ·  $5189 + 4283 = 9472$  (N) ·  $2411 + 3809 = 6220$  (D) ·  $2902 + 2465 = 5367$  (T)

#### Clue 3 (Subtraction): "THE SUSPECT WAS BLINDED BY FLOODLIGHTS"

$7599 - 1347 = 6252$  (T) ·  $11575 - 4531 = 7044$  (N) ·  $7704 - 2021 = 5683$  (Y) ·  $5335 - 2120 = 3215$  (E) ·  $7667 - 2 = 7665$  (G) ·  $4892 - 811 = 4081$  (D) ·  $6829 - 1871 = 4958$  (C) ·  $10103 - 2178 = 7925$  (W) ·  $6051 - 4107 = 1944$  (U) ·  $8258 - 4878 = 3380$  (I) ·  $9162 - 3374 = 5788$  (P) ·  $6612 - 1304 = 5308$  (B) ·  $6080 - 194 = 5886$  (H) ·  $11329 - 2343 = 8986$  (S) ·  $6962 - 3008 = 3954$  (F) ·  $4602 - 1237 = 3365$  (A) ·  $6251 - 2161 = 4090$  (O) ·  $2816 - 652 = 2164$  (L)

#### Clue 4 (Multiplication facts (1-12)): "THE CRIME SCENE HAD A CURLY HAIR STRAND"

$12 \times 4 = 48$  (T) ·  $7 \times 7 = 49$  (R) ·  $2 \times 1 = 2$  (Y) ·  $9 \times 5 = 45$  (S) ·  $8 \times 5 = 40$  (M) ·  $9 \times 11 = 99$  (N) ·  $12 \times 8 = 96$  (A) ·  $1 \times 4 = 4$  (D) ·  $1 \times 3 = 3$  (U) ·  $5 \times 1 = 5$  (L) ·  $1 \times 9 = 9$  (I) ·  $7 \times 6 = 42$  (E) ·  $11 \times 6 = 66$  (H) ·  $2 \times 4 = 8$  (C)

#### Clue 5 (Division facts (1-12)): surviving statement is box 6 → Mia Cleat

$72 \div 9 = 8$  ·  $1 \div 1 = 1$  ·  $14 \div 7 = 2$  ·  $110 \div 11 = 10$  ·  $70 \div 10 = 7$  ·  $120 \div 10 = 12$  ·  $36 \div 12 = 3$  ·  $32 \div 8 = 4$  ·  $15 \div 3 = 5$  ·  $99 \div 9 = 11$  ·  $9 \div 1 = 9$