



The Golden Trophy Mystery

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

Detective: _____ Date: _____

The stadium was buzzing with excitement and loud vuvuzelas when suddenly the golden World Cup Trophy vanished from the referee's locker room! The thief is one of the star tournament players who slipped away during halftime.

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 Trophy Thief is _____

Possible suspects

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

NAME	SOCCER SKILL	SIGNATURE GEAR	PLAYER TYPE	DREADLOCK STYLE	DISTRACTION
Chloe	teleport dribble	sparkly headband	boy player	beaded dreadlocks	squeaky whistle
Ben	cannonball shot	glowing socks	boy player	neon dreadlocks	loud vuvuzela
Kai	teleport dribble	neon wristband	girl player	neon dreadlocks	squeaky whistle
Amelia	teleport dribble	neon wristband	boy player	short dreadlocks	loud vuvuzela
Sofia	cannonball shot	lucky whistle	boy player	short dreadlocks	loud vuvuzela
Lily	cannonball shot	lucky whistle	boy player	beaded dreadlocks	loud vuvuzela
Toby	super speed kickoff	lucky whistle	girl player	short dreadlocks	squeaky whistle
Max	magnetic glove save	glowing socks	girl player	neon dreadlocks	wet muddy patch
Jack	magnetic glove save	golden cleats	boy player	short dreadlocks	loud vuvuzela
Ava	backflip header	glowing socks	boy player	short dreadlocks	loud vuvuzela
Harper	cannonball shot	neon wristband	boy player	neon dreadlocks	loud vuvuzela
Nora	super speed kickoff	glowing socks	boy player	short dreadlocks	loud vuvuzela
Sam	super speed kickoff	neon wristband	girl player	neon dreadlocks	wet muddy patch
Ethan	super speed kickoff	sparkly headband	boy player	short dreadlocks	squeaky whistle
Ruby	backflip header	lucky whistle	boy player	short dreadlocks	loud vuvuzela
Lucas	backflip header	neon wristband	girl player	short dreadlocks	loud vuvuzela
Oliver	backflip header	lucky whistle	girl player	beaded dreadlocks	wet muddy patch
Zoe	cannonball shot	neon wristband	girl player	short dreadlocks	loud vuvuzela
Mason	super speed kickoff	sparkly headband	boy player	beaded dreadlocks	loud vuvuzela
Evelyn	super speed kickoff	lucky whistle	boy player	beaded dreadlocks	squeaky whistle
Ella	magnetic glove save	neon wristband	boy player	short dreadlocks	squeaky whistle

CLUE 1 Rounding

The stadium security guard checked the turnstile counter. The screen only displays numbers rounded to the nearest hundred. The guard estimated the crowd size to find the first clue.

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

<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>		
70	700000	1400000	70	700000	28000	1400000	310000	700	3100000	1400000	500	31000	3100000	70	3100000	280000	31000
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>		
4700000	280	14000	200000	3000	70000	280000	700000	28000	500	70	280	1400000					

- | | | | | | | | | |
|---|----------------------|--------------------------------|---|----------------------|--------------------------------|---|----------------------|--------------------------------|
| Round 69 to the nearest ten | <input type="text"/> | <input type="text" value="T"/> | Round 281,387 to the nearest ten thousand | <input type="text"/> | <input type="text" value="W"/> | Round 3,344 to the nearest thousand | <input type="text"/> | <input type="text" value="K"/> |
| Round 4,673,895 to the nearest hundred thousand | <input type="text"/> | <input type="text" value="A"/> | Round 451 to the nearest hundred | <input type="text"/> | <input type="text" value="S"/> | Round 30,964 to the nearest thousand | <input type="text"/> | <input type="text" value="N"/> |
| Round 710 to the nearest hundred | <input type="text"/> | <input type="text" value="D"/> | Round 312,946 to the nearest ten thousand | <input type="text"/> | <input type="text" value="F"/> | Round 1,415,325 to the nearest hundred thousand | <input type="text"/> | <input type="text" value="E"/> |
| Round 13,614 to the nearest thousand | <input type="text"/> | <input type="text" value="U"/> | Round 203,424 to the nearest hundred thousand | <input type="text"/> | <input type="text" value="C"/> | Round 3,087,394 to the nearest hundred thousand | <input type="text"/> | <input type="text" value="O"/> |
| Round 68,297 to the nearest ten thousand | <input type="text"/> | <input type="text" value="Y"/> | Round 681,485 to the nearest hundred thousand | <input type="text"/> | <input type="text" value="H"/> | Round 28,157 to the nearest thousand | <input type="text"/> | <input type="text" value="I"/> |
| Round 277 to the nearest ten | <input type="text"/> | <input type="text" value="L"/> | | | | | | |

Scratch space:

CLUE 2 Addition

To find the next clue, we helped the snack stand crew tally up all the juice boxes and sports drinks sold during halftime. Adding the totals together revealed a secret note left under the counter.

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

<input type="checkbox"/> A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9022	2041	9409	6001	6117	2752	9022	6001	9481	9316	9316	9022	2135	7658	9316	9409	5301
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6598	4995	9481	2752	9409	4212	8543	9481	9316	9316	9409	9409	5301				

$2987 + 6035 =$	<input type="checkbox"/>	<input type="checkbox"/> A	$1246 + 889 =$	<input type="checkbox"/>	<input type="checkbox"/> N	$2768 + 3233 =$	<input type="checkbox"/>	<input type="checkbox"/> Y
$3955 + 3703 =$	<input type="checkbox"/>	<input type="checkbox"/> F	$1960 + 3035 =$	<input type="checkbox"/>	<input type="checkbox"/> H	$2258 + 3043 =$	<input type="checkbox"/>	<input type="checkbox"/> M
$4108 + 2009 =$	<input type="checkbox"/>	<input type="checkbox"/> P	$2732 + 1480 =$	<input type="checkbox"/>	<input type="checkbox"/> C	$1406 + 635 =$	<input type="checkbox"/>	<input type="checkbox"/> B
$3642 + 4901 =$	<input type="checkbox"/>	<input type="checkbox"/> K	$989 + 1763 =$	<input type="checkbox"/>	<input type="checkbox"/> L	$4027 + 5382 =$	<input type="checkbox"/>	<input type="checkbox"/> O
$3430 + 3168 =$	<input type="checkbox"/>	<input type="checkbox"/> T	$5950 + 3366 =$	<input type="checkbox"/>	<input type="checkbox"/> R	$2956 + 6525 =$	<input type="checkbox"/>	<input type="checkbox"/> E

Scratch space:

CLUE 3

Subtraction

The team captain noticed some shiny keychains were missing from the gift shop. By subtracting the remaining keychains from the starting inventory, she figured out exactly how many the thief took.

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

<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
5782	6945	2644	5215	4815	1909	7043	7480	1909	7480	1909	7894	2644	5215	1779	

<input type="text" value="T"/>	<input type="text"/>	<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	
5782	4815	5782	1779	5215	5215	8553	7043	7138	8228	5782	2215	1779	2066	5782	2644	7043

<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
5782	6945	2644	6314

6081 - 299 =	<input type="text"/>	<input type="text" value="T"/>	7879 - 741 =	<input type="text"/>	<input type="text" value="I"/>	4003 - 2094 =	<input type="text"/>	<input type="text" value="U"/>
11925 - 4882 =	<input type="text"/>	<input type="text" value="D"/>	5872 - 3806 =	<input type="text"/>	<input type="text" value="C"/>	1991 - 212 =	<input type="text"/>	<input type="text" value="A"/>
6970 - 656 =	<input type="text"/>	<input type="text" value="M"/>	3132 - 488 =	<input type="text"/>	<input type="text" value="E"/>	9019 - 1539 =	<input type="text"/>	<input type="text" value="V"/>
9114 - 4299 =	<input type="text"/>	<input type="text" value="O"/>	10751 - 2523 =	<input type="text"/>	<input type="text" value="S"/>	10720 - 2167 =	<input type="text"/>	<input type="text" value="Y"/>
8948 - 3733 =	<input type="text"/>	<input type="text" value="L"/>	10593 - 2699 =	<input type="text"/>	<input type="text" value="Z"/>	8009 - 1064 =	<input type="text"/>	<input type="text" value="H"/>
5857 - 3642 =	<input type="text"/>	<input type="text" value="R"/>						

Scratch space:

CLUE 4

Multiplication facts (1-12)

The referee looked at the rows of soccer ball racks lined up in the equipment room. By multiplying the number of rows by the balls in each row, we unlocked a safe containing a hidden message.

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

<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
32	70	25	32	70	100	25	84	70	64	49	22	25	63	108	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
48	70	77	63	32	49	63	25	64	49	40	77	120	9	48	

$8 \times 4 =$	<input type="text"/>	<input type="text" value="T"/>	$9 \times 12 =$	<input type="text"/>	<input type="text" value="Y"/>	$3 \times 3 =$	<input type="text"/>	<input type="text" value="K"/>
$7 \times 10 =$	<input type="text"/>	<input type="text" value="H"/>	$7 \times 11 =$	<input type="text"/>	<input type="text" value="O"/>	$6 \times 8 =$	<input type="text"/>	<input type="text" value="S"/>
$7 \times 7 =$	<input type="text"/>	<input type="text" value="D"/>	$8 \times 8 =$	<input type="text"/>	<input type="text" value="A"/>	$10 \times 4 =$	<input type="text"/>	<input type="text" value="L"/>
$9 \times 7 =$	<input type="text"/>	<input type="text" value="R"/>	$12 \times 7 =$	<input type="text"/>	<input type="text" value="F"/>	$5 \times 5 =$	<input type="text"/>	<input type="text" value="E"/>
$10 \times 10 =$	<input type="text"/>	<input type="text" value="I"/>	$10 \times 12 =$	<input type="text"/>	<input type="text" value="C"/>	$11 \times 2 =$	<input type="text"/>	<input type="text" value="V"/>

Scratch space:

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

A group of young fans wanted to share a bag of colorful vuvuzelas equally. When they divided the toys among themselves, the leftover vuvuzela had the final clue taped inside its horn.

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:

$8 \div 2 = \boxed{}$

$24 \div 3 = \boxed{}$

$7 \div 1 = \boxed{}$

$6 \div 2 = \boxed{}$

$3 \div 3 = \boxed{}$

$70 \div 7 = \boxed{}$

$90 \div 10 = \boxed{}$

$35 \div 7 = \boxed{}$

$8 \div 4 = \boxed{}$

$99 \div 9 = \boxed{}$

$60 \div 10 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain fires a cannonball shot, then flashes their golden cleats.
2. The villain makes a magnetic glove save, then blows their lucky whistle.
3. The villain leaps for a backflip header, then adjusts their neon wristband.
4. The villain performs a teleport dribble, then adjusts their neon wristband.
5. The villain fires a cannonball shot, then fixes their sparkly headband.
6. The villain makes a magnetic glove save, then fixes their sparkly headband.
7. The villain does a super speed kickoff, then shows off their glowing socks.
8. The villain makes a magnetic glove save, then flashes their golden cleats.
9. The villain performs a teleport dribble, then flashes their golden cleats.
10. The villain does a super speed kickoff, then fixes their sparkly headband.
11. The villain fires a cannonball shot, then shows off their glowing socks.
12. The villain leaps for a backflip header, then shows off their glowing socks.

Answer Key

The Golden Trophy Mystery

Culprit: Ava

backflip header · glowing socks · boy player · short dreadlocks · loud vuvuzela

Trail: Start 21 → Clue 1 15 → Clue 2 10 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE THIEF DOES NOT OWN A LUCKY WHISTLE"

Round 69 to the nearest ten = 70 (T) · Round 281,387 to the nearest ten thousand = 280000 (W) · Round 3,344 to the nearest thousand = 3000 (K) · Round 4,673,895 to the nearest hundred thousand = 4700000 (A) · Round 451 to the nearest hundred = 500 (S) · Round 30,964 to the nearest thousand = 31000 (N) · Round 710 to the nearest hundred = 700 (D) · Round 312,946 to the nearest ten thousand = 310000 (F) · Round 1,415,325 to the nearest hundred thousand = 1400000 (E) · Round 13,614 to the nearest thousand = 14000 (U) · Round 203,424 to the nearest hundred thousand = 200000 (C) · Round 3,087,394 to the nearest hundred thousand = 3100000 (O) · Round 68,297 to the nearest ten thousand = 70000 (Y) · Round 681,485 to the nearest hundred thousand = 700000 (H) · Round 28,157 to the nearest thousand = 28000 (I) · Round 277 to the nearest ten = 280 (L)

Clue 2 (Addition): "A BOY PLAYER RAN FROM THE LOCKER ROOM"

$2987 + 6035 = 9022$ (A) · $1246 + 889 = 2135$ (N) · $2768 + 3233 = 6001$ (Y) · $3955 + 3703 = 7658$ (F) · $1960 + 3035 = 4995$ (H) · $2258 + 3043 = 5301$ (M) · $4108 + 2009 = 6117$ (P) · $2732 + 1480 = 4212$ (C) · $1406 + 635 = 2041$ (B) · $3642 + 4901 = 8543$ (K) · $989 + 1763 = 2752$ (L) · $4027 + 5382 = 9409$ (O) · $3430 + 3168 = 6598$ (T) · $5950 + 3366 = 9316$ (R) · $2956 + 6525 = 9481$ (E)

Clue 3 (Subtraction): "THE LOUD VUVUZELA TOTALLY DISTRACTED THEM"

$6081 - 299 = 5782$ (T) · $7879 - 741 = 7138$ (I) · $4003 - 2094 = 1909$ (U) · $11925 - 4882 = 7043$ (D) · $5872 - 3806 = 2066$ (C) · $1991 - 212 = 1779$ (A) · $6970 - 656 = 6314$ (M) · $3132 - 488 = 2644$ (E) · $9019 - 1539 = 7480$ (V) · $9114 - 4299 = 4815$ (O) · $10751 - 2523 = 8228$ (S) · $10720 - 2167 = 8553$ (Y) · $8948 - 3733 = 5215$ (L) · $10593 - 2699 = 7894$ (Z) · $8009 - 1064 = 6945$ (H) · $5857 - 3642 = 2215$ (R)

Clue 4 (Multiplication facts (1-12)): "THE THIEF HAD VERY SHORT DREADLOCKS"

$8 \times 4 = 32$ (T) · $9 \times 12 = 108$ (Y) · $3 \times 3 = 9$ (K) · $7 \times 10 = 70$ (H) · $7 \times 11 = 77$ (O) · $6 \times 8 = 48$ (S) · $7 \times 7 = 49$ (D) · $8 \times 8 = 64$ (A) · $10 \times 4 = 40$ (L) · $9 \times 7 = 63$ (R) · $12 \times 7 = 84$ (F) · $5 \times 5 = 25$ (E) · $10 \times 10 = 100$ (I) · $10 \times 12 = 120$ (C) · $11 \times 2 = 22$ (V)

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

$8 \div 2 = 4$ · $24 \div 3 = 8$ · $7 \div 1 = 7$ · $6 \div 2 = 3$ · $3 \div 3 = 1$ · $70 \div 7 = 10$ · $90 \div 10 = 9$ · $35 \div 7 = 5$ · $8 \div 4 = 2$ · $99 \div 9 = 11$ · $60 \div 10 = 6$